MID-TERM REVIEW OF THE CLIMATE-INDUCED DISASTER RISK REDUCTION PROJECT (CDRRP)

for UNDP Afghanistan

Final Report

Prepared by Dr Steve Goss and Sharif Wahdati

March 2021

BASIC REPORT INFORMATION

Table 1: Basic report information

<table>
<tr><td colspan="3">Project title: Adapting Afghan Communities to Climate-Induced Disaster Risks</td></tr>
<tr><td>Country: Afghanistan</td><td>Implementing Partner: Ministry of Agriculture, Irrigation and Livestock</td><td>Management Arrangements: National Implementation Modality</td></tr>
<tr><td colspan="3">UNDAF/Country Programme Outcome: UNDAF Outcome 1/CPD Outcome 3. Economic growth is accelerated to reduce vulnerabilities and poverty, strengthen the resilience of the licit economy and reduce the illicit economy in its multiple dimensions.</td></tr>
<tr><td colspan="3">UNDP Strategic Plan Output: Output 5.3: Gender responsive disaster and climate risk management is integrated in the development planning and budgetary frameworks of key sectors (e.g. water, agriculture, health, education).</td></tr>
<tr><td colspan="2">UNDP-GEF PIMS ID number: 5398</td><td>GEF ID number: 6914</td></tr>
<tr><td colspan="2">LPAC date: December 2016</td><td>Signed ProDoc: September 2017</td></tr>
<tr><td colspan="2">Start date: September 2017</td><td>End date: September 2022</td></tr>
<tr><td>MTR contract start date: 1 October 2020</td><td>Draft MTR report submitted: 26 January 2020</td><td>Final MTR report submitted: 10 March 2021</td></tr>
<tr><td colspan="2">International evaluator: Dr Steve Goss</td><td>National evaluator: Sharif Wahdati</td></tr>
</table>

Table 2: Project summary

Afghanistan Climate-Induced Disaster Risk Reduction Project (CDRRP)	
Objective: Reduced loss of lives & livelihoods from climate-related disasters **Budget:** $ 6.6 million ($ 5.6 m GEF LDCF + $ 1.0 m UNDP) **Period**: September 2017 – September 2022 Implemented by MAIL and supported by UNDP	
Components & outcomes	**Outputs**
1. Disaster risk reduction measures $ 1.0 million (15 %)	1.1. Awareness raised
	1.2. People trained
	1.3. Risk mapping & vulnerability assessments
2. Early warning systems $ 1.6 million (24 %)	2.1. Hazard monitoring systems
	2.2. Communication systems
	2.3. Response mechanisms
3. Resilient structures & livelihoods $ 3.1 million (47 %)	3.1. Climate-resilient structures
	3.2. Diversified livelihoods (through providing greenhouses, beehives etc. plus extension support)
4. Climate-aware policies $ 0.3 million (5 %)	4.1. National adaptation objectives & options
	4.2. Provincial Climate Action Plans & Community Development Plans
	4.3. Increased capacity of NEPA Climate Change Unit
	4.4. Trained policymakers
	4.5. Lessons learned & shared
Project management $ 0.6 million (9 %)	Management of the project and the GEF and UNDP budgets.

Acknowledgements

The evaluation team would like to thank: Mohammed Salim (Programme Analyst) for his help and constructive discussions throughout the evaluation; Yumeng (Emily) Yao (International Consultant for Reporting and Communications) for extensive support with data and information on all aspects of the project; Muhammad Yasir Nassery (Project Manager) and the CDRRP project teams in Kabul, Jalalabad and Sheberghan for their openness, support and rapid response to questions; and the Lead Farmers, beneficiaries and other respondents to the field survey for their time, information and helpful observations.

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GLOSSARY

Currencies

$: United States' dollars.

AFN: Afghani.

Exchange rate of $ 1 = AFN 77 used where specific conversions are not available.

Measures

All measurements other than farmland areas use the "SI" international system.

Farmland may be reported as hectares (**ha**) or in the local measures of **jeribs** (2,000 m^2) and **biswa** (100 m^2 = 1 metric are), so 1 ha = 5 jeribs = 100 biswa.

Organisations

- **UNDP**: *United Nations Development Programme*; the organisation managing this project.
- **GEF**: *Global Environment Facility*, which was established on the eve of the 1992 Rio Earth Summit to help tackle the planet's most pressing environmental problems; the lead funding organisation for this CDRRP project.
- **MAIL, PAIL, DAIL**: Afghanistan's national *Ministry for Agriculture, Irrigation and Livestock* (MAIL), and its Provincial (PAIL) and District (DAIL) offices; the main implementing partner.
- **ANDMA**: *Afghanistan National Disaster Management Authority*, the lead organisation for disaster preparedness and response.
- **CDC**: *Community Development Council*, local elected structures established throughout Afghanistan under the government's National Solidarity Programme, which function as the main partner for local implementation of many CDRRP activities.
- **MRRD***: Ministry of Rural Rehabilitation and Development*, responsible *inter alia* for supporting CDCs.

Other ***organisations and projects***

- UNDP projects:
    - **CDRRP**: *Climate-Induced Disaster Risk Reduction Project* managed by UNDP and implemented by MAIL, covering communities in Nangarhar and Jawzjan provinces; the project being reviewed here.
    - **CBARD (East & West)**: *Community-Based Agriculture and Rural Development Projects* also managed by UNDP and implemented by MAIL. The first project, CBARD-West, began in 2016 and supported communities in Badghis and Farah provinces; a second project, CBARD-West, began in 2018 and operates in Nangarhar province.
    - **CCAP**: UNDP-MAIL *Climate Change Adaptation Project*
    - **CDRRP**: UNDP-MAIL *Climate-induced Disaster Risk Reduction Project*
- **USAID**: *United States Agency for International Development*

- **CHAMP**: USAID *Commercial Horticulture and Agriculture Marketing Program*, being implemented by Roots of Peace.
- **AIM**: *Access to International Markets* project, funded by INL and implemented by Roots of Peace under CBARD.
- **NHLP**: *National Horticulture and Livestock Project*, funded by the World Bank and implemented by MAIL.
- **FAO**: *United Nations Food and Agriculture Organisation*.

Executive summary

[1] Afghanistan is a mountainous, low-income and highly rural country, with much of its population at risk from floods, droughts, landslides, avalanches and earthquakes. Climate change is already making the country markedly hotter and is predicted to increase the frequency and severity of all natural disasters except earthquakes.

[2] The CDRRP project aims to improve the preparedness and resilience of selected Afghan communities to climate-induced disaster risks through four components:

1. Disaster risk reduction measures
2. Early warning systems
3. Resilient structures & livelihoods
4. Climate-aware policies

The project runs from September 2017 to September 2022 and has a budget of $ 6.6 million ($ 5.6 million GEF LDCF + $ 1.0 million UNDP); it operates in 30 rural communities in the provinces of Jawzjan and Nangarhar (see *Table 1: Basic report information* and *Table 5: Project summary*).

[3] The project has so far:

a. Prepared hazard maps and disaster plans, conducted training, integrated climate change into community development plans, established community-based disaster committees and begun establishment of early warning systems in all 30 communities.
b. Begun or completed construction of climate-resilient infrastructure in 15 communities, estimated to benefit 31,000 people including 15,000 women.
c. Begun or completed delivery of livelihoods support to 993 beneficiaries, including 410 women and 36 households of the Kuchi minority.

The project is on track to meet or exceed all quantitative targets in its Results Framework, and in many cases has already done so; all gender targets have been met for activities implemented so far (see *Table 9: Progress towards results matrix*). The main issues identified in this review relate to the relevance, quality and sustainability of project activities.

[4] The aim of the Mid-Term Review was to assess this project's progress against objectives and propose any necessary changes to make it more successful and sustainable, as well as to learn lessons for future projects. The review was conducted from October 2020 to February 2021; due to the Covid-19 pandemic it emphasised the use of virtual meetings, document review and data analysis. The survey of 111 beneficiaries and non-beneficiaries used a combination of field visits and telephone interviews. It found that the project was well regarded, that its infrastructure interventions were considered appropriate and effective, and that its livelihoods interventions were bringing a significant increase in beneficiary household incomes. The Early Warning System, though still at an early stage, had been activated on one occasion and helped to save lives from floods affecting two project communities. The project has succeeded in raising awareness about climate change amongst Lead Farmers and beneficiaries but has so far had less impact on the rest of the community. No significant issues of unfairness or exclusion were reported.

The main conclusions and recommendations of the Mid-Term Review are summarised below.

[5] The ***overall project objectives*** of "preparedness" and "resilience" are not defined in measurable terms.

- *Recommendation 4: The project objective should be reformulated as "to reduce the damage to lives and livelihoods caused by climate-induced disasters".*

[6] Current ***monitoring systems*** focus on activities and provide little information on overall impact. The Results Framework does not include any assessment of the quality of outputs such as planning documents. The project duration is too short to assess the impact of orchards, nurseries and orchard toolkits, or the long-term viability of the milk collection centres.

- *Recommendation 5: Mechanisms should be established to measure the impact of disasters on project and comparator communities, so as to assess the overall effectiveness of the project.*
- *Recommendation 6: The financial impact of livelihoods interventions should be systematically monitored and priority given to the most cost-effective interventions.*
- *Recommendation 7: UNDP should continue to monitor the impact of long-term interventions beyond the life of the original project and use the findings to inform design of future projects; a cooperative multi-donor approach to monitoring and cost-benefit analysis of common interventions* might be effective.

[7] The relevance of the ***livelihoods interventions*** to disaster resilience is tenuous; the exclusive focus on agriculture is contrary to the recommendations of the baseline study and its finding that the large majority of rural household income derives from non-agricultural sources. Selection of MAIL as the main implementing partner almost certainly contributed to this emphasis on agriculture.

- *Recommendation 1: Future projects should consider carefully the relevance of agricultural interventions to their overall objective and the needs of the target population; for the remainder of this project, priority should be given to activities and training that directly address* disaster resilience.

[8] Many of the "climate-smart agriculture" approaches used in the livelihoods interventions apply on a limited area and so make little contribution to the large-scale production of cereals for household food security, and remain vulnerable to any disruption of the irrigation water supply.

- *Recommendation 2: This &/or future projects should look at large-scale adaption of agriculture to climate change, including cereals. Options include increased irrigation, reduced tillage, drought- & heat-resistant varieties, and water storage to continue irrigating high-value crops during dry summers.*

[9] The ***Early Warning Systems*** are described as "community based" and the systems developed so far rely on community dissemination of warnings generated by the project and by the communities themselves. Reliance on the project is not sustainable and an exclusively community-based approach will have limited ability to forecast disasters and issue early warnings. This is recognised by the project, whose workplan includes

support to committees established by ANDMA at district and province level. However, little progress has yet been made in this respect.

- *Recommendation 3:* The project should review its approach to Early Warning Systems, together with ANDMA, AMD, MoEW and other institutions, and seek a more sustainable, comprehensive and effective model. It should increase cooperation with and support provided to ANDMA.

[10] The ***quality*** of the climate- and disaster-related sections of the Community Development Plans is questionable; without a change of approach it is likely that the Provincial Climate Action Plans and related training would also be of low quality and limited value.

- *Recommendation 9: The project should use international experience and training resources for preparation of the Provincial Climate Action Plans and invite feedback from relevant national and international organisations.*

[11] Looking at ***sustainability*** across all components, the mosque loudspeaker systems and the community infrastructure should remain functional for many years and contribute to disaster resilience. The long-term impact of the other project activities is less certain. Sustainability of the project's work on extension could be enhanced by training and sharing materials with MAIL extension staff as widely as possible.

- *Recommendation 14: CDRRP staff should train MAIL extension officers from all districts of Nangarhar and Jawzjan, and ideally other provinces as well, to increase the impact and sustainability of its extension work.*

[12] The project's ***M&E system*** has compiled comprehensive data on project activities but still faces issues in relation to data entry, quality control and analysis. The underlying information structure (communities, beneficiaries, contracts, interventions, training courses, trainees) is very similar for CDRRP, CCAP and the two CBARD projects, which together administer more than $ 60 million of project funds.

- *Recommendation 13: UNDP should build a common system for management and monitoring of such projects, with robust and user-friendly data-entry forms and a comprehensive set of analytical tools.*

[13] ***Project management*** suffered from a lack of high-quality technical support for the first two years of the project, resulting in slow initial implementation and contributing to an emphasis on familiar agricultural interventions rather than a clear focus on the overall objective of building resilience to climate-induced disasters. This stems partly from insufficient budget allocation to cover all the different technical aspects of the project, and partly from the very real difficulty of finding high-quality staff for specialist areas. The decision to work in two different provinces substantially increased the requirement for organisational and support staff, further reducing the budget available for technical input.

- *Recommendation 10: Future projects should ensure that they have sufficient technical resources to design and implement each technical component well. Where the technical staff budget is a binding constraint, the project should limit the number of different components and interventions to avoid spreading its resources too thinly.*
- *Recommendation 11: Projects should avoid working in multiple provinces if they do not have sufficient resources to serve all accessible target beneficiaries in even one province.*

[14] The review saw no evidence of widespread ***irregularities*** from project documents, audit and spot-check reports, meetings or the field survey. Each of the 59 interviewed recipients of livelihoods interventions reported that all promised items were delivered in full and were of good quality.

[15] Problems encountered included the ***Covid-19 pandemic*** and the difficult ***security*** situation, particularly in Jawzjan province. These factors affected implementation of both the project and the mid-term review. Frequent ***power cuts*** are a problem for much of the country, required the project to buy a generator for its Jalalabad office and affected the mid-term review; however, UNDP and the project offices in Kabul, Jalalabad and Sheberghan now have reliable power supplies.

[16] Two aspects of the ***Results Framework*** are not now appropriate: (i) the project is working in 30 communities and so cannot and should not prepare 60 Community Development Plans; (ii) the original plan of a regional workshop to share lessons learned would not be appropriate during the Covid-19 pandemic.

- *Recommendation 8: The quantitative target for Community Development Plans should be amended from 60 to 30 and the regional workshop should be replaced with a virtual workshop convened by the project.*

Table 3: MTR ratings and achievement summary table for CDRRP

Category or component		Rating	Achievement description
Project strategy		N/A	The project addresses real needs and formal national priorities, but stakeholders do not always see reduction of climate-induced disaster risks as a priority. The focus on agriculture in livelihoods interventions is not consistent with the findings and recommendations of the project's Baseline Survey and Needs Assessment.
Progress towards results	**Objective**: To improve the preparedness and resilience of selected Afghan communities to climate-induced disaster risks	Moderately Unsatisfactory	The overall objective is not defined in measurable terms, no overall targets are set in the Results Framework and no mechanisms are in place to measure achievement of the objective. Therefore there are no end-of-project targets to assess, and the project cannot yet demonstrate that it will significantly improve disaster preparedness or resilience.
	Outcome 1: Decision-making and implementation of gender-sensitive climate-induced disaster risk reduction measures in selected communities enhanced	Satisfactory	All end-of-project targets have already been met. Training has been delivered to 2,100 people across all 30 project communities. Awareness of climate change issues amongst members of project communities is still limited, but the project targeted much of its awareness raising at the general public rather than specifically at project communities.
	Outcome 2: Community-based early warning systems established and effectively utilised by all vulnerable groups	Moderately Satisfactory	Early warning loudspeaker systems are being installed in all project communities but the mechanisms to develop early warnings require further work. Emergency response plans have been developed for all communities but have not yet been tested, though there is a realistic timetable to complete this work. Plans consider the needs of women and vulnerable groups.
	Outcome 3: Climate-resilient livelihoods focusing on vulnerable groups are implemented in selected communities	Satisfactory	Climate-resilient structures and livelihoods interventions have been delivered effectively and are well received by beneficiaries. The interventions do support livelihoods, most of them include climate-resilient elements, and many women have been reached, so Outcome 3 is being achieved. The wider issue is to what extent this outcome contributes to the overall project objective, given that only 17 % of Component 3 expenditure to date has gone on interventions that have medium or high relevance to increasing resilience to climate-induced disasters, and that half of the livelihoods budget has gone on one kind of intervention (greenhouses) with relatively high cost and limited disaster relevance.
	Outcome 4: Strengthened institutional capacities to integrate climate risks and opportunities into national and provincial development plans, policies, budgetary allocation and implementation mechanisms	Moderately Satisfactory	Climate issues have been integrated into Community Development Plans, though there are some concerns over the quality of these documents. Most policy work at national and provincial level has yet to begin so its effectiveness cannot yet be assessed.
Project implementation & adaptive management		Highly Satisfactory	The project has been implemented effectively and has adapted to changing circumstances including security challenges and Covid-19. Implementation is behind schedule in some areas but credible steps are being taken to address this and the project is expected to achieve all of its quantitative targets.
Sustainability		Moderately Likely	Community early warning loudspeaker systems and infrastructure interventions appear highly sustainable, whilst ratings would vary across the various livelihoods interventions. Sustainability of the system to generate early warnings cannot yet be assessed as key institutional work has only just begun.

Note: A key to the ratings is given on the following page.

Table 4: Key to ratings

Ratings for Progress Towards Results: (one rating for each outcome and for the objective)		
6	Highly Satisfactory (HS)	The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as "good practice".
5	Satisfactory (S)	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
4	Moderately Satisfactory (MS)	The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
3	Moderately Unsatisfactory (HU)	The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.
2	Unsatisfactory (U)	The objective/outcome is expected not to achieve most of its end-of-project targets.
1	Highly Unsatisfactory (HU)	The objective/outcome has failed to achieve its midterm targets, and is not expected to achieve any of its end-of-project targets.
Ratings for Project Implementation & Adaptive Management: (one overall rating)		
6	Highly Satisfactory (HS)	Implementation of all seven components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – is leading to efficient and effective project implementation and adaptive management. The project can be presented as "good practice".
5	Satisfactory (S)	Implementation of most of the seven components is leading to efficient and effective project implementation and adaptive management except for only few that are subject to remedial action.
4	Moderately Satisfactory (MS)	Implementation of some of the seven components is leading to efficient and effective project implementation and adaptive management, with some components requiring remedial action.
3	Moderately Unsatisfactory (MU)	Implementation of some of the seven components is not leading to efficient and effective project implementation and adaptive, with most components requiring remedial action.
2	Unsatisfactory (U)	Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management.
1	Highly Unsatisfactory (HU)	Implementation of none of the seven components is leading to efficient and effective project implementation and adaptive management.
Ratings for Sustainability: (one overall rating)		
4	Likely (L)	Negligible risks to sustainability, with key outcomes on track to be achieved by the project's closure and expected to continue into the foreseeable future
3	Moderately Likely (ML)	Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Midterm Review
2	Moderately Unlikely (MU)	Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on
1	Unlikely (U)	Severe risks that project outcomes as well as key outputs will not be sustained

List of recommendations

1 Introduction

The Climate-induced Disaster Risk Reduction Project (CDRRP), funded by the Global Environment Facility (GEF), managed by the United Nations Development Programme (UNDP) and implemented by Afghanistan's Ministry of Agriculture, Irrigation and Livestock (MAIL), runs from September 2017 until September 2022. This Mid-Term Review (MTR) was carried out from October 2020 to March 2021 by a team of two independent consultants, one international and one from Afghanistan, on the basis of physical and virtual meetings, documentary and data analysis, field survey and telephone interviews.

1.1 Purpose of the mid-term review

The ultimate purpose of this mid-term review is to improve the effectiveness of this and other projects, through lessons learned. To achieve this, it aims to:

a) Assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document;
b) Assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results;
c) Review the project's strategy and its risks to sustainability.

1.2 Scope & methodology

This Mid-term Review was conducted from October 2020 to March 2021. Due to the Covid-19 pandemic it was not possible for the international evaluator to conduct a mission to Afghanistan, though he was familiar with the country and most of the project stakeholder organisations from two previous evaluations. The evaluation methodology was adapted to the health and security situation and used a combination of desk study, data analysis, virtual meetings and fieldwork by the national evaluator. It involved the following stages:

1) **Initial review & discussion** of documents and data, leading to the Inception Report.
2) **Meetings & fieldwork**, leading to an online presentation of initial survey findings.
   a) Physical, virtual and hybrid[1] meetings.
   b) Field survey of 111 individuals in 21 communities of Nangarhar and Jawzjan provinces[2]. A combination of field visits and telephone interviews were used in Nangarhar; all interviews in Jawzjan were done by telephone due to the security situation.
3) **Analysis & reporting**, leading to the draft MTR report.
   a) Detailed analysis of project monitoring data.
   b) Comprehensive analysis of survey data.
   c) Report writing.

[1] In "hybrid" meetings, the national evaluator was physically present and the international evaluator joined by internet.

[2] The survey covered 3 districts in each province, with 3-4 communities in each district. See Annex 4 for the survey design, methodology and results.

4) *To follow*: **Discussion & finalisation** will lead to the final MTR report.
    a) Discussion with project management.
    b) Response to written comments.

The methodology was designed to provide evidence-based information that is credible, reliable and useful. A list of the people interviewed is provided in Annex 8, whilst the documents reviewed are listed in Annex 9. Considerable attention was given to establishing a quantitatively reliable picture, both through analysis of the project database and Tracking Tool, and through a relatively large survey of Lead Farmers, beneficiaries and non-beneficiaries in project communities.

A number of key questions were identified during the inception period and included in the Inception Report; these are shown in the Evaluation Matrix of Annex 3. These were discussed in detail with the project team, the UNDP Country Office, the Regional Technical Advisor and other stakeholders in this very participatory evaluation. The questions also guided the design of the field questionnaire. It was noted that some of the issues applied also to other projects being run by the Country Office, and so some of the recommendations go wider than this specific project but share its wider aims.

Limitations affecting the Mid-term Review

The final MTR report should describe the full MTR approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

The main obstacles that affected the mid-term review process were:

- The Covid-19 pandemic, which prevented the planned international mission and made all physical meetings risky. Widespread use was made of virtual meetings and e-mail exchange, which resulted in effective dialogue.
- The difficult security situation in Jawzjan, which prevented the national evaluator from travelling to the province. In response, the Jawzjan project team was interviewed virtually and the field survey there was carried out through telephone interviews.
- A lack of quantitative data in some areas, with surveys of area, price and yield being planned but not yet implemented. The MTR team responded by collecting detailed quantitative data through the field survey and also analysing data from similar interventions by other projects.
- The usual factor of project beneficiaries trying to show the project in a good light and saying what they think the interviewer wants to hear. Piloting of the questionnaire found that this was a major factor with group discussions, and so the approach was changed to use individual interviews only, wherever possible without other people present. The interviewer also probed carefully and put questions in different ways to elicit as honest an answer as possible.

1.3 Report structure

The remainder of this report closely follows the standard GEF template for Mid-term Reviews:

- Chapter 2 presents the ***Project description and context***, including the development context and problems addressed. Section 2.3 gives an overview of the situation in the two project provinces of Nangarhar and Jawzjan, and then explains in some detail what is actually being done under each project component. The remainder of the chapter deals with project implementation arrangements, timing and stakeholders.
- Chapter 3 presents the ***Findings*** of the mid-term review in the following five sections. Recommendations are developed throughout this chapter and numbered sequentially; they are brought together in the *Executive summary* and *List of recommendations* above.
    - Section 3.1 looks at ***Project strategy*** and particularly at (a) whether the project is focussing on the right activities to achieve its overall objectives, and (b) whether it has defined those objectives in measurable terms and set up mechanisms to measure their achievement.
    - Section 3.2 is a non-standard section to present the ***Survey findings***. As the survey touched on almost every aspect of the project, this section gives a comprehensive overview from the perspective of the beneficiaries themselves.
    - Section 3.3 examines ***Progress towards results***, starting with the standardised data of the Progress Towards Results matrix and the GEF Tracking Tool, and adding further quantitative information on the core infrastructure and livelihoods interventions. It concludes by noting the *Remaining barriers to achieving the project objective*.
    - Section 3.4 looks at all aspects of ***Project implementation and adaptive management,*** including management, finance, monitoring & evaluation, stakeholder involvement, reporting and communication.
    - Section 3.5 considers ***Sustainability***, highlighting the main risks and making a number of recommendations to mitigate them.
- Chapter 4 develops the report's ***Conclusions*** and gives a succinct restatement of its main ***Recommendations***.
- A series of ***Annexes*** give additional background information about the mid-term review, including a detailed report on the ***Survey methodology & results*** in Annex 4. The following annexes may be of long-term use to the project team and should assist in implementation of some of the review's recommendations:
    - Annex 2: ***Description of interventions***
    - Annex 5: ***Cost-benefit analysis of project interventions***
    - Annex 6: ***Suggested approach to design of a project database***

2 Project description and context

The CDRRP project can be summarised as follows:

Table 5: Project summary (repeated)

Afghanistan Climate-Induced Disaster Risk Reduction Project (CDRRP)	
Objective: Reduced loss of lives & livelihoods from climate-related disasters[3] **Budget:** $ 6.6 million ($ 5.6 GEF LDCF + $ 1.0 m UNDP) **Period**: September 2017 – September 2022 Implemented by MAIL and supported by UNDP	
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4. Climate-aware policies $ 0.3 million (5 %)	4.1. National adaptation objectives & options
	4.2. Provincial Climate Action Plans & Community Development Plans
	4.3. Increased capacity of NEPA Climate Change Unit
	4.4. Trained policymakers
	4.5. Lessons learned & shared
Project management $ 0.6 million (9 %)	Management of the project and the GEF and UNDP budgets.

[3] The Project Document states that "The objective of the project is to improve the preparedness and resilience of selected Afghan communities to climate induced disaster risks". However, as noted in section 3.1.2, neither preparedness nor resilience are defined in a measurable way, so this table uses a measurable restatement of the objective in line with Recommendation 3.

[4] Where necessary, component titles have been reworded as clear, one-line statements. The full text titles for each component in the Project Document are: Component/Outcome 1: Decision-making and implementation of gender-sensitive climate-induced disaster risk reduction measures in selected communities enhanced; Component/Outcome 2: Community-based early warning systems established and effectively utilised by all vulnerable groups; Component/Outcome 3: Climate-resilient livelihoods focusing on vulnerable groups are implemented in selected communities; Component/Outcome 4: Strengthened institutional capacities to

integrate climate risks and opportunities into national and provincial development plans, policies, budgetary allocation and implementation mechanisms.

It should be noted that whilst the focus of component 1 is on climate-induced disasters, the risk mappings and response plans also address the important non-climate risk of earthquakes.

[5] The activity required to produce these outputs is noted where not self-evident (e.g. the activity of *Awareness-raising campaigns* brings the output of *Awareness raised*).

2.1 Development context

Afghanistan is a land-locked country in south-central Asia bordering Iran, Turkmenistan, Uzbekistan, Tajikistan, China and Pakistan. It has a land area of around 650,000 km^2 and a population of around 37 million[6]. Over 3 million people live in the capital, Kabul, with a further 2 million living in eleven other towns and cities of more than 75,000 people, whilst the remaining 86 % of the population live in small towns and rural villages.

The western extent of the Himalayas extends far into Afghanistan as the Hindu Kush mountain range, dividing the country into the Central Highlands (around 65 % of total area), the Southwestern Plateau (25 %) and the Northern Plains (10 %). Over half of Afghanistan's surface lies at more than 2,000 metres above sea level. Snow melt from the high mountains feeds most of the country's major rivers but the country's continental location means that summer rainfall is generally low and much of its lowland is arid or semi-arid. This combination of geographical factors makes various parts of Afghanistan prone to droughts, flash floods, landslides, avalanches and earthquakes. All but the last of these are driven by climate, and the country is already seeing the impact of climate change in an increased frequency and severity of extreme weather and consequent climate-induced disasters.

A country's ability to avert and respond to climate-related disasters depends greatly on its socio-economic situation as well as its geography. Afghanistan is classified by the UN as one of the 47 Least Developed Countries, i.e. low-income countries confronting severe structural impediments to sustainable development, and is currently ranked 171st out of 188 countries according to the UNDP Human Development Index. For several decades, Afghanistan has been ravaged by conflicts that have seriously impeded development and made it hard for the country to predict and prepare for climate-induced disasters. When sudden disasters such as floods do occur, the country's response is hampered by the challenging terrain, precarious security situation and poor state of basic infrastructure such as roads, telecommunications, electricity supplies and health services.

Afghanistan's response to these challenges relies heavily on community-based development, as set out in the Citizen's Charter and implemented through a network of some 30,000 Community Development Councils (CDCs). Government responsibility for preparing for and responding to disasters is assigned to the Afghanistan National Disaster Management Authority (ANDMA), which is charged with implementing the 2018 Afghanistan Strategy for Disaster Risk Reduction. However, ANDMA does not have presence on the ground in rural areas whilst the Ministry of Agriculture, Irrigation and Livestock (MAIL) has long experience of implementing rural livelihoods projects , and so MAIL was chosen as the implanting partner for the Climate-Induced Disaster Risk Reduction Project (CDRRP) as it seeks to work with government to improve people's lives.

[6] For comparison, Afghanistan is similar in size to France but with just over half the population.

2.2 Problems addressed

The underlying problem as described above is Afghanistan's inherent susceptibility to natural disasters, further worsened by climate change. On top of this, Afghanistan's status as one of the world's Least Developed Countries means that the impact of these disasters may be particularly high due to five main factors:

1. The moderately high dependence of rural areas on agriculture[7] means that droughts and flooding of farmland can have serious consequences for household incomes.
2. Many communities contain homes in areas liable to flash floods and landslides.
3. Many roads, irrigation systems and other infrastructure are quite vulnerable to floods and earthquakes.
4. Capacity to predict, prevent and respond to natural disasters is generally low, exacerbated by poor roads, telephone and internet connections in rural areas, and major problems with electricity supply throughout the country.
5. Government responses to these challenges are hampered by lack of funds, low institutional capacity and major security problems in many rural areas.

The project directly addresses each of these five factors, but implementation of the project itself faces the challenges of poor communications, security and institutional capacity.

2.3 Project description and strategy

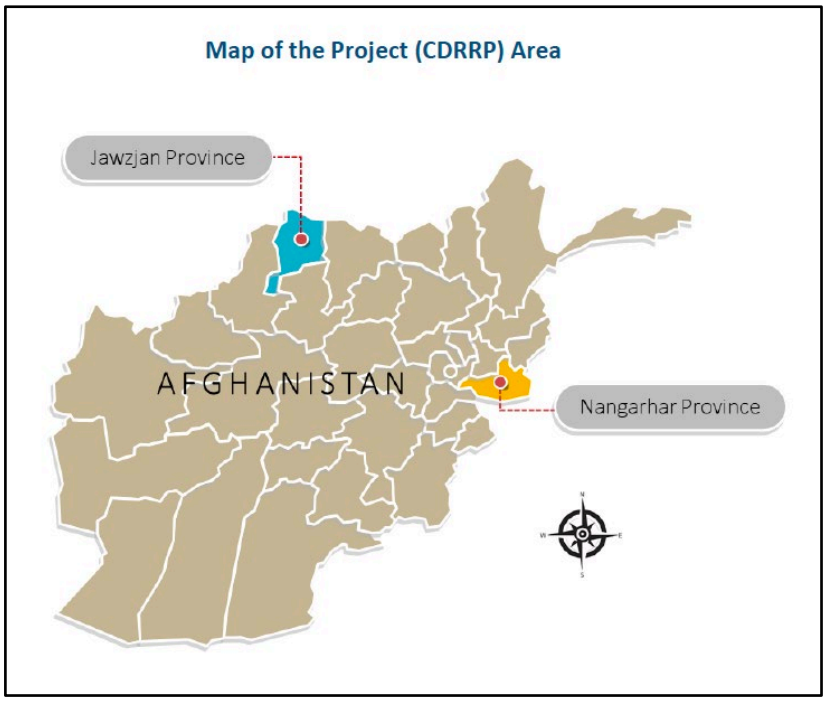
The main elements of the project are summarised in Table 5 above. They are described in more detail below, together with short summaries of the activities planned or undertaken under each Component, following a short overview of the project areas. This section aims simply to present the facts of the project, with later sections examining the relevance and effectiveness of the various activities.

[7] The Baseline Survey and Needs Assessment found that agriculture and livestock provide 10 % of household income in Jawzjan and 25 % in Nangarhar.

Field sites and Lead Farmers

The project is being implemented in 30 rural communities, 15 of them in Nangarhar province in the east of Afghanistan and 15 in Jawzjan province in the north[8]:

Figure 1: Map of the project areas



Source: Baseline Study & Needs Assessment

Nangarhar province has a hot, semi-arid climate with most of the rain falling in the winter and spring months. Snow melt on the nearby Hindu Kush Mountains and rains on adjacent barren hills cause river surges and flash floods during spring, which are the most prevalent cause of natural disaster.

The province is reasonably secure and project staff are generally able to travel to the communities. The baseline study found that project villages typically comprise 300-400 households of which almost half own land, with an average of 2-3 ha of mainly irrigated land per farming household. The most common crops are wheat and vegetables, with wheat yields some 25 % above the national average.

The largest component of household income is wages, at an average of 31 %, followed by agriculture and livestock at 25 %. Literacy is around average at 52 % for men and 14 % for women.

Jawzjan province is significantly drier, with a steppe climate and large areas of desert. Rain falls mainly from November to May, peaking in February-April, when seasonal river flows through the province from the southern highlands can cause flash floods. However, in this hot dry climate, heatwaves and droughts are more common than heavy rains and floods.

The security situation in Jawzjan is currently difficult, with anti-government elements controlling parts of the road from Kabul to the provincial capital of Mazar-al-Sharif; this

[8] One additional community, Qazel Ayaq in Khwaja Du Koh district of Jawzjan province, is also reported as receiving 5 individual livelihoods interventions but no studies, training or community-based interventions.

sometimes prevents project staff from travelling to the field and delays implementation. The baseline study found that project villages are slightly bigger than those in Nangarhar province, typically with 600-700 households. There is an average of around 7 ha of land per household but only a quarter of it is cultivated, mainly due to the shortage of water. Agriculture and livestock make a relatively small contribution to average household income, at 10 %, coming in fourth place after wages, own business and other income.

Literacy amongst adult men is around 28 %, just over half that in the Nangarhar villages, but female literacy is similar at 11 % and a third of households are headed by women, three times the rate in Nangarhar.

An important part of the project's strategy is the recruitment of ***Lead Farmers*** to represent the project in the communities, provide training and advice to other farmers, and carry out regular activities such as delivering early warning messages. Each project community has one male and one female Lead Farmer, who are paid a monthly salary for carrying out their role.

2.3.1 Component 1: Disaster risk reduction measures

The objective of this component is to improve decision making and implementation of measures to reduce the risk from climate-induced disasters. It operates at two different levels: *nationally*, to raise awareness of climate-change amongst policy makers and the general public, and *locally*, to support planning for disaster preparedness and response in the chosen project communities.

The main activities carried out under this component have been:

- Annual national campaigns on social media, on the "International Day of Disaster Reduction" in 2019 and 2020 (planned again for 2021, so ongoing).
- Training of Lead Farmers, members of Community Development Councils (CDCs) and other members of the project communities (completed).
- Training of a limited number of other policy makers and stakeholders (awareness-raising of Nangarhar provincial government staff and Nangarhar university students; completed)
- Preparation of detailed "Hazard and Risk Mapping and Vulnerability Assessments" for each of the 30 project communities (completed). These helped developed response plans for when early warnings are given under Component 2 and guided the selection of other project interventions, particularly the infrastructure interventions of Component 3.1.

Training and awareness-raising workshops

The following 6 training courses and workshops were held under this component:

- ***Climate Change***:
    - *Awareness & adaption* (1-2 days; 789 people)
    - *Community-based Development* (2 days; 530 people)
    - *Integration into Community Development Plans* (1 day; 690 people)
    - *Gender* (2 days; 67 people)
    - *Hazard mapping* (2 days; 855 people)
- ***Disaster Response***:
    - *Search & Rescue and First Aid* (3 days; 126 people)

Training involved 2,100 different people in an average of 1.4 training courses each, over a total of 5,000 trainee days. The main professions of the trainees were recorded as[9]:

- Farmers: 1,080
- Community members: 680
- Housewives: 580
- Lead farmers: 260
- Students: 120

2.3.2 Component 2: Early warning systems

The stated objective is to ensure that community-based early warning systems are established and effectively utilised by all vulnerable groups. This should result in community members receiving and acting on warnings before disasters strike, thereby reducing loss of life.

The main activities carried out under this component have been:

- Establishment of Disaster Management Committees in each project community (completed)
- Training of Disaster Management Committees in early warning systems and disaster response (2 days; 530 people).
- Procurement of loudspeaker systems and solar power supplies so that warnings can be broadcast by community mosques (ongoing).
- Formation and operation of WhatsApp groups for project staff to share warnings of extreme weather with Lead Farmers, who should then notify others in the community (ongoing).

The project's vision for this component is set out in the draft 2020 Annual Progress Report. In line with ANDMA's strategy, it envisages Disaster Management Committees at provincial, district and community level, with both bottom-up and top-down flow of information and warning messages. Community Based Disaster Management Committees set up under this project will be responsible for conveying warnings to community members and for coordinating the local response. Province and district level committees already exist in theory, established by ANDMA outside this project, but are at a very early stage of

[9] One person may have been counted more than once due to attending multiple training courses.

development (province committees in Nangarhar and Jawzjan formed and staffed, but not trained or equipped; district committees not yet formed in any of the six project districts). The project is now starting to support District Disaster Management Committees and has, in some cases, identified additional upstream communities and begun training people there to phone downstream project communities to give perhaps two hours' warning of a flood wave.

2.3.3 Component 3: Resilient structures & livelihoods

This large component has two distinct sub-components: *3.1. Climate-resilient structures* and *3.2. Diversified livelihoods*.

Climate-resilient structures

This sub-component has two implicit objectives: to *save lives* by giving people safe places to shelter or receive medical care during disasters[10], and to *reduce loss and damage* to community infrastructure by making it more able to withstand disasters[11]. The specific activities (Planned/Completed) under this sub-component so far are:

- *Multi-purpose emergency shelters* (2/0) – to provide shelter during disasters and serve the community at other times, e.g. as schools.
- *Drinking water reservoirs* (6/6) – to provide a safe source of drinking water that is less likely to dry up during droughts or to be contaminated during floods.
- *Flood-protection walls* (3/2) – to reduce the risk of floods reaching homes and endangering life and property, or of damaging farmland or infrastructure such as roads and bridges.
- *Irrigation structures* (6/4) – primarily aimed at making existing irrigation structures less susceptible to flood damage, but also at increasing the water supply and the irrigable area[12].

Climate-resilient structures have been planned or completed in 15 of the project's 30 communities.

Diversified livelihoods

The objective of this sub-component is to "address the impacts of climate change on vulnerable groups within the targeted communities … with a focus on the empowerment of women and the youth within targeted communities"[13]. Income-generating interventions relate exclusively to agriculture and have an emphasis on high-value products. The specific activities (Started/Completed) under this sub-component so far are:

[10] *The project will develop appropriate designs for climate-resilient habitats and disaster/emergency shelters for multiple purposes. For example, disaster/emergency shelters will be designed to serve as first aid clinics and emergency evacuation centres, taking into account the needs of different groups during disasters (e.g. with separate spaces for men and women, patients and those people that need medical attention).* ProDoc, p.16.

[11] *In addition, small-scale rural infrastructure such as check dams and terracing will be constructed that will reduce the risk of losses and damages caused by climate-induced disaster events (such as floods, flash floods and associated landslides).* ProDoc, p.16.

[12] The draft Annual Progress Report for 2020 reports that irrigation interventions in 2020 will improve irrigation on 600 ha and protect 900 ha of land from flooding, so both benefits were important.

[13] ProDoc, p.16.

- ***Dairy***:
    - *Dairy toolkits* (452/452) – To improve milk hygiene and allow the production of added-value dairy products
    - *Milk collection centres* (21/21[14]) – To improve milk hygiene, allow the production of added-value dairy products and improve marketing
- ***Food processing***:
    - *Food processing equipment & training* (55/5) – To allow women to process and preserve food for their household or for sale
- ***Greenhouses***:
    - *Macro-greenhouses* (150/71) – To provide an opportunity to generate a significant income from a small area of land
    - *Micro-greenhouses* (84/59) – To provide an opportunity to generate a significant income from a small area of land within or close to the household compound so it can be managed by women
- ***Horticulture***:
    - *Vegetable trellising* (135/135) – To increase yields by growing plants on a bamboo-&-wire framework for better access to light and air.
    - *Kitchen garden packages* (13/13) – To help women generate an income by establishing vegetable gardens.
    - *Drip irrigation systems* (2/2) – To improve yields of high-value crops such as vegetables, and to increase the area of land that can be irrigated with a limited quantity of water.
    - *Orchard toolkits* (50/50) – To allow better management of orchards, leading to higher yields and better fruit quality
    - *Citrus nurseries* (37/15) – To establish a high-value business for the owners and reliable supply of plants for local citrus orchard growers

Livelihoods interventions have been implemented across all 30 project communities[15], though the number of started or completed interventions per community ranges from 9 to 127 with an average of 33.

The project has produced useful summary sheets for several of the interventions, which are attached as Annex 2.

[14] Three milk collection centres have been planned and completed, for which the project database records 21 direct beneficiaries: 20 cooperative members and 1 private owner.

[15] At least one greenhouse was also delivered to a 31st community that was not covered in the training, hazard mapping or other community activities. It was reported that the Jawzjan project office included this community at the request of the DAIL office, because the head of the CDC there was very interested in the project.

2.3.4 Component 4: Climate-aware policies

The objective of this component is to strengthen institutional capacity to integrate climate issues into policy at national, provincial and community level. This will involve:

- *Staff training*, so far implemented mainly through training of CDC members under Component 1 (ongoing).
- *Sharing of lessons learned* through regional processes (on hold due to Covid-19).
- *Support for the drafting of Provincial Climate Action Plans* for Nangarhar and Jawzjan provinces (not yet started).
- *Support for integrating climate change into the next round of Community Development Plans* (completed).
- *Increasing capacity of the NEPA Climate Change Unit*, so far addressed by IT equipment delivered in October 2020[16] and by provision of one full-time staff member from 2020, who has already completed a number of activities[17] (ongoing).

2.4 Project implementation arrangements

The Project Board comprises representatives from UNDP, MAIL, the National Environmental Protection Agency (NEPA), the Ministry of Energy and Water (MEW), the Ministry of Rural Rehabilitation and Development (MRRD), the Afghanistan National Disaster Management Authority (ANDMA), the Afghanistan Meteorological Authority (AMA), the Ministry of Women's Affairs (MoWA) and Kabul University. The board meets at least twice a year to assess the performance of the project and approve the Annual Work Plan for the following year.

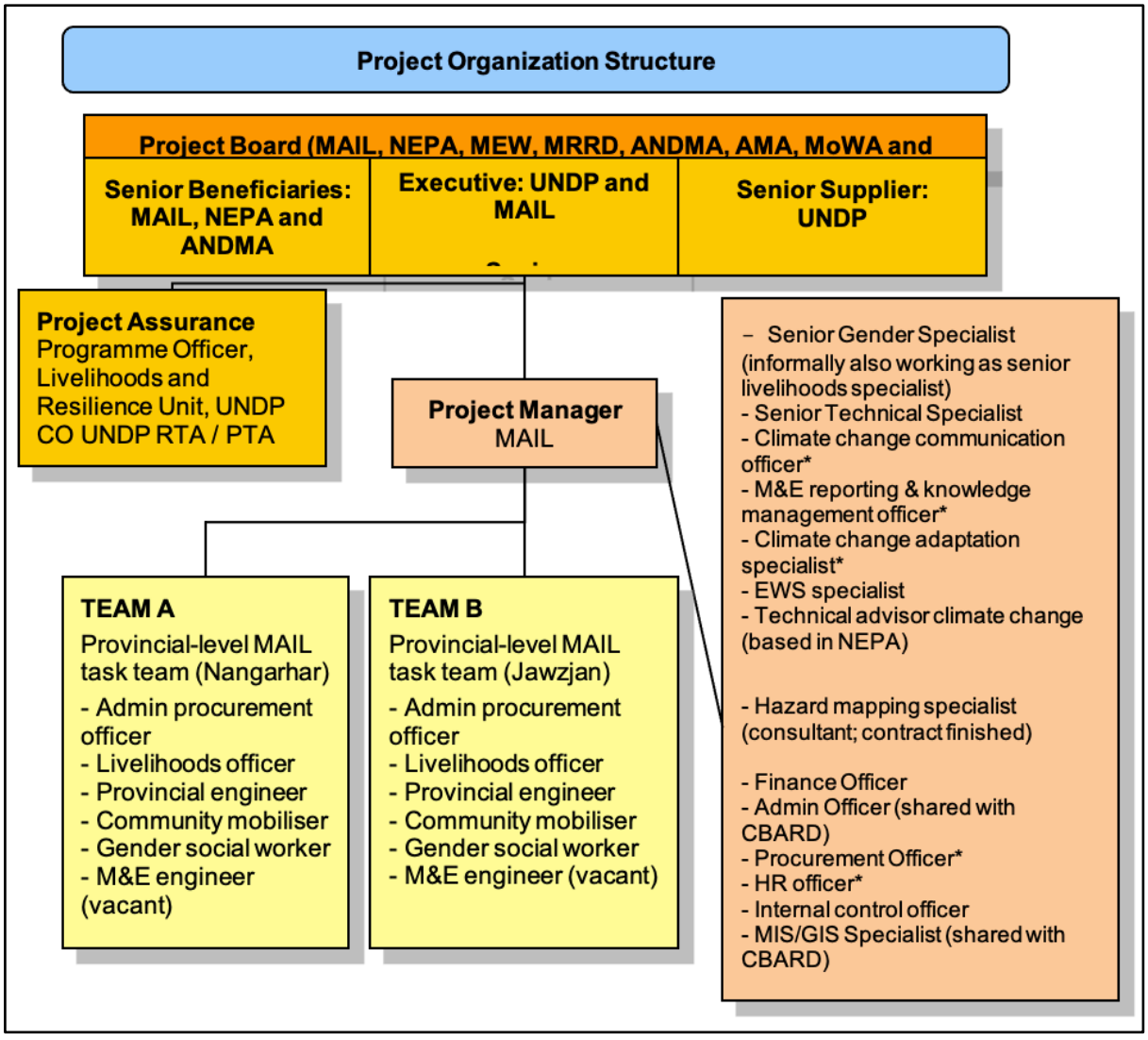
MAIL, the main implementing partner, employs full-time project staff in Kabul and in its provincial offices in Jalabad (Nangarhar) and Sheberghan (Jawzjan). Teams from the province offices travel regularly to the field for implementation, training and monitoring, and are continually supported by the hired Lead Farmers in each project community.

[16] Reported to the MTR team as 12 laptops with accessories, 6 digital cameras and 2 printers.

[17] Reported to the MTR team as ten major tasks completed (*1. Drafted content for inclusion of Environment as a subsector in ANPDF II; 2. Created a framework and schedule for access to GCF funds: 3. Scientific literature review on air pollution control filters; 4. Social research training to newly employed staffers at NEPA; 5 Proposal to the Basel Convention on Plastic Pilot Project; 6. Finalizing the Plastic Assessment Report; 7 Coordination of funds between CDRRP and NEPA-Jawzjan for Climate Change Week 2020; 8. Data analysis and visualization for the tree planting report; 9. Drafted COVID19 waste management guidelines; 10. Edited, analysed the data, and finalized the solid waste country report*), with one task currently ongoing (*1. A comprehensive analysis and report of water quality data collected from six provinces due end of this month*) and one planned for February 2021 (*Strategic overhaul of the Directorate for Environmental Inspection and Audit including responsibility, legalities, and capacity building needs*).

The organisational structure was set out in the Project Documents but the staffing evolved over time, so Figure 2 below shows the structure in early November 2020 (*denotes recently recruited staff):

Figure 2: Project organisational structure in early November 2020



2.5 Project timing and milestones

Table 6 on the following pages sets out the major project milestones, achievements and issues over time. The most important milestones were:

- **2017:**
    - Inception workshop.
    - Recruitment of core management team.
- **2018:**
    - Adoption of Inception Report.
    - Baseline survey, leading to final selection of project districts and communities.
    - Change of Project Manager.
- **2019:**
    - Beginning of wide-scale training under Component 1 (Disaster risk reduction measures).
    - Further recruitment and staff reallocation, covering infrastructure, livelihoods, early warning systems and climate change. This allowed strategic decisions to be made on Component 2 (Early warning systems) and real progress to begin on Component 3 (Resilient structures and livelihoods); it will hopefully also lead to accelerated progress on Component 4 (Climate-aware policies).
- **2020:**
    - Onset of Covid pandemic, impacting many project activities.

These milestones highlight the over-riding importance of strong managerial and technical leadership: until the right people were in place, the project made very little progress.

Table 6: Project milestones

Component	Sub-component	2017	2018	2019	2020
0. Project management	Project team	- Inception workshop - Project manager, provincial coordinators and other field staff appointed	- Project Manager resigned (Aug); - Yasir appointed as Acting Project Manager	- Climate Change Specialist resigned (Sept) - Senior technical specialist Bakhtyar appointed, focussed on infrastructure (July) - EWS specialist joined (late 2019) - Tahira (gender office with agriculture background) took over livelihoods component as no livelihoods person in Kabul - Hazard mapping consultant joined (mid 2019 until completion of all hazard maps in third quarter 2020)	New Climate Change Specialist appointed (Sept)
	Field activities	-	- Surveyed 50 communities & selected 30 - Changed 2 districts due to security issues - Conducted baseline survey	-	-
	Partnerships		Q2: Meetings with Nursery Growers' Association, RADP-E, SRACAD, MoWA, MRRD, People's Action Q3: Governor of Nangarhar, DAIL Director, NHLP, SNaPP2, OFWMP Q4: Nangarhar PAIL, MRRD, ANDMA; stakeholders at community & district level	Q1: UNEP, INGOs in N & J, 4 CDC presidents Q2: Consultation on EWS (ICIMOD, AMD, ANDMA, MEW); cooperation with NHLP, SNNaP2	Q1: AWCCI Q2: Nangarhar provincial ANDMA & PMD; central ANDMA; Jawzjan ARCS (Red Crescent) Q3: UNEP, CIMMYT
	Reporting		Q4: Inception Report completed	Q1: Project Board meeting	Q1: Project Board meeting
	Issues		Q1: Security; project manager (see above); electricity shortages in Nangarhar (bought generator) Q2: Lack of willingness of community members to cooperate Q3: Security (change of 2 districts) - Lack of livelihoods and infrastructure staff in Kabul (not mentioned as an issue in project reports)	Q1: Livelihoods training approach not very effective Q2: Slow approval of infrastructure projects; indecision over EWS design	Q1: Beginning of Covid pandemic Q2: Covid delays & cancellations Q3: Covid affected MCCs & food processing - Hard to find literate LFs in some places, esp. women Component 4 about to restart

Component	Sub-component	2017	2018	2019	2020
1. Disaster risk reduction measures	1.1. Awareness raising	-	-	- 1st online campaign (11,781 people) - Nangarhar workshop (39) - Community fora in Nangarhar (584)	- 2nd online campaign (42,889 people) - 1,147 people reached in person - Jawzjan workshop - 6 CDC workshops in N & J (587 people)
	1.2. Training	-	-	- 240 people trained in 2019 (in the narrative but not in results framework) due to confusion over what this indicator really meant. - Weather monitoring was partially covered and additional training will be provided for all CBDMC members. in 2021.	- Trained 615 people (2020 APR gives a total of 855 trained but 2019 APR gave 0. When were the 240 trained?)
	1.3. Risk mapping & assessment	-			- Completed 30 hazard maps
2. Early warning systems	2.1. Hazard monitoring systems	-			- Established 30 CBDMCs
	2.2. Communication systems	-			- Project started sharing weather data with CBDMCs.
	2.3. Response mechanisms	-			- First Aid training provided to 30 communities - 30 DRR plans prepared
3. Resilient buildings & livelihoods	3.1. Climate-resilient buildings	-	- 7 projects designed	- 6 water reservoirs & 4 irrigation canals completed	- 2 flood walls, 2 irrigation structures & 8 water reservoirs completed
	3.2. Diversified livelihoods	-	- 11 interventions delivered (8 GHs, 3 nurseries)	- 93 interventions delivered (4 dairy, 2 drip irrigation, 1 food processing, 37 GH, 1 kitchen garden, 1 other, 12 nurseries, 35 trellises) - Yield survey conducted	- 219 interventions delivered (104 GHs, 100 trellises, 10 nurseries, 3 dairy toolkits, 2 food processing)
4. Climate-aware policies	4.1. Provincial & Community plans	-	- Designed "Climate adaptation toolkit"	Q1: Began work on CDPs	- 30 CDPs updated with climate elements
	4.3. Trained policymakers	-	-	-	- One full-time staff member and set of IT equipment (12 laptops, 6 digital cameras, 2 printers) provided to NEPA Climate Change Unit (general capacity building rather than specifically training).
	4.4. Lessons learned & shared	-	-	-	-

2.6 Main stakeholders

The main project stakeholders are:

- The organisations represented on the Project Board and listed in section 2.4 above.
- Lead Farmers, beneficiaries and members of Community Development Councils, plus all members of project communities who benefit from Early Warning Systems, Disaster Response Plans and resilient infrastructure.

In addition to organisations represented on the Project Board, development partners include UNICEF, FAO, UNEP, USAID, the Aga Khan Foundation and other international NGOs.

3 Findings

The findings of the mid-term review are presented here under *Project strategy*, *Progress towards results*, *Project implementation and adaptive management* and *Sustainability,* plus a section specifically on *Survey findings*.

3.1 Project strategy

This section examines whether the project has really set out to do the right things.

3.1.1 Project design

Problem and assumptions

The project correctly identifies climate-related disaster risks. It is not clear what share of the current risk stems from long-standing climate patterns and what share is due to anthropogenic climate change, but there are probably insufficient data to answer this question for Afghanistan.

Whilst communities recognise the risk of climate-induced disasters, they seem to prioritise general livelihoods over disaster risk reduction, as evidenced by their support for livelihoods interventions that have limited relevance to climate-induced disasters (see Recommendation 6 below: *The financial impact of livelihoods interventions should be systematically monitored and priority given to the most cost-effective interventions.*)

Relevance and effectiveness

This heading from the GEF MTR Guidelines is addressed under the following section.

Relevance of agriculture to project communities

The baseline study clearly showed that agriculture is a minority source of household income for project communities in both provinces[18] but it has been made the sole focus of livelihoods interventions. This is despite the finding and recommendation of the baseline study that "*Agriculture and livestock are not the major contributors to household income. Daily wages or labor is a major source of income for most of the households in the treatment villages. Most of the treatment villages are located near provincial capital and people can commute on daily basis between their villages and the provincial capital. Wage earners sell vegetables and fruit, run rikshaws, and work in transport, construction, trading, and informal enterprises in the provincial capitals*" and "*Wages are the biggest contributor to household income in both provinces. Project should facilitate non-farm and off-farm vocational training, employment, and linkages or provide cash-for-work opportunities both to men and women through its various sub-projects"*[19]. Contributing factors for the project's focus on agriculture may include the selection of MAIL as implementing partner, the Country Office's existing portfolio of agriculture projects and successes in this area, and the emphasis on agriculture by the

[18] CDRRP Baseline Survey & Needs Assessment found that for surveyed communities:

- In Nangarhar, the largest component of household income is wages, at an average of 31 %, followed by agriculture and livestock at 25 %.
- In Jawzjan, agriculture and livestock make a relatively small contribution to average household income, at 10 %, come in fourth place after wages, own business and other income.

[19] CDRRP Baseline Survey & Needs Assessment , page 71 and Executive Summary page xix.

President of Afghanistan. Interventions were selected based on community requests, which may have been influenced by the kinds of interventions they saw under other projects in nearby villages.

Box 1 below explains the selection process for interventions and beneficiaries as described by the project team; the fact that three of the four groups called to the meeting (MAIL extension officers, lead farmers and farmer representatives) are from agriculture will have contributed to the focus on agricultural interventions:

Box 1: Selection process for interventions and beneficiaries

Project selection process for interventions and beneficiaries

The provincial team does a needs assessment through a meeting with extension officers, CDC members, lead farmers and some farmer representatives (30-50 people) to find out general problems communities face and, based on the problems, they will suggest certain technical solutions to see how they are received by the meeting participants.

Based on that meeting, they will prepare a form that provides justifications for specific interventions and send it off to PAIL and then the Kabul team for approval.

Once the intervention is approved, the team again hosts a meeting in the community. They ask extension officers, CDC members, lead farmers to distribute the news and invite people who are struggling with livelihoods to apply. At the meeting, applicants come and fill out the beneficiary selection form with help from lead farmers. The team also ask them questions about farming to make sure they have the right skills.

Based on the weighted criteria in the beneficiary selection form [which gives weights for the presence of vulnerable household members, weak economic status, and any other factors identified and noted by the field officer], the team selects the ones who score the highest and then visit their houses and interview them and check with neighbours about their situation to make sure the information they provided is genuine.

The field survey under this mid-term review confirmed that agriculture was usually not the main source of household income, even amongst lead farmers and beneficiaries who were deliberately selected because of their involvement in agriculture[20].

One potential consequence of this focus on agriculture is that some of the most vulnerable people in the community, those who do not own land, may find themselves excluded from the project interventions.

Relevance of interventions to climate-induced disaster resilience

Climate-resilient infrastructure is highly relevant to reducing the risks from climate-induced disasters and has so far received 50 % of funds contracted under Component 3. However, it

[20] Of all respondents in the MTR survey, 39 % (Nangarhar 29 %; Jawzjan 43 %) listed agriculture as their main source of household income; the other 61 % had mixed income sources, which sometimes included wage employment in agriculture.

Results by type of respondent were:

- Lead farmers: 24 % of households got their main income from agriculture.
- Beneficiaries: 45 % …
- Non-beneficiaries: 31 % …

has covered only half the project area, with a total of 17 projects planned in 15 communities, whilst livelihoods interventions have been delivered to 31 communities.

The following table gives an overall assessment of the direct relevance of each kind of Component 3 intervention to the stated project objective of increasing resilience to climate-induced disasters, together with an assessment of its relevance to the understood secondary objective of climate change adaptation. Two points should be noted:

- Irrigation infrastructure is effectively a livelihoods intervention applied at community rather than household level.
- Counts and expenditures represent interventions completed by the end of 2020.

The assessment considers the direct relevance of the activity in terms of making the system less susceptible to the effects of disasters or climate change, and does not include the indirect income effect. For example, dairy toolkits and milk collection centres depend on having milk to collect and process. In a drought year, fodder production will fall and milk yields will fall with it, affecting all dairy farmers alike, regardless of whether or not they benefitted from dairy toolkits or milk collection centres. Hence these interventions have no direct relevance to either disaster risk reduction or climate change adaption. However, farmers whose dairy enterprises are more profitable in normal circumstances may have higher savings, which would tend to increase their resilience to disasters of all kinds, though the same would apply to anything that increased household income, such as getting a job in town or buying a car and starting a taxi business. This indirect effect of livelihoods interventions is not considered in the table.

Table 7: Direct relevance of interventions to disaster resilience & climate change adaptation

Intervention (contracts/beneficiaries)	**Direct relevance to disaster resilience/climate change**	**Expenditure**
Community infrastructure (12; $ 202,000; 16 %)		
Water reservoirs 6)	**High**/High (provides essential water supplies during drought)	$ 47,000 (3.8 %)
Flood protection (2)	**High**/High (protects communities from the most frequent type of disaster)	$ 125,000 (10 %)
Irrigation (4)	**High**/High (protects irrigation systems from floods, protects farmland against drought and improves uses of scarce water during drought)	$ 30,000 (2.4 %)
Emergency shelters (0)	**High**/Medium (offer protection against floods, landslides & earthquake after-shocks)	$ 0 (0.0 %)
Livelihoods interventions (335/1009; $ 1,047,000; 84 %)		
Dairy toolkits (4/455)	**None**/None (does nothing to protect cows or fodder crops from drought or floods)	$ 109,000 (8.7 %)
Milk collection centres (3/21)	**None**/None (does nothing to protect cows or fodder crops from drought or floods)	$ 17,000 (1.4 %)
Food processing (3/55)	**None**/None (does nothing to protect food crops from drought or floods)	$ 26,000 (2.1 %)
Greenhouses, macro (71/157)	**Low**/Low-Medium (improves use of scarce water during droughts, on a small area)	$ 507,000 (41 %)
Greenhouses, micro (78/84)	**Low**/Low-Medium (improves use of scarce water during droughts, on a small area)	$ 112,000 (9.0 %)
Drip irrigation (2/2)	**Medium**/High (improves use of scarce water during droughts, on a larger area)	$ 8,000 (0.6 %)
Kitchen gardens (1/13)	**None**/Low (no special measures of flood or drought protection but could irrigate)	$ 3,000 (0.2 %)
Nurseries (37/37)	**None**/Low (citrus fruit offers much higher income than arable crops but requires a lot more water, even with drought-resistant varieties)	$ 61,000 (4.9 %)
Orchard toolkits (1/50)	**None**/Low (helps protect orchards against pests & diseases, which may become more common with climate change)	$ 18,000 (1.4 %)
Vegetable trellising (135/135)	**None**/Low (helps protect crops against pests & diseases, and terraces against soil erosion, which may become more common with climate change)	$ 186,000 (15 %)

Source: Numbers from project database; assessment by MTR team.

The following table summarises expenditure by relevance rating, and shows that only 17 % of Component 3 expenditure to date has gone on interventions that have medium or high relevant to increasing resilience to climate-induced disasters; 83 % of project funds under this component have gone on activities with little or no direct relevance to disaster resilience:

Table 8: Summary of expenditure by disaster relevance

Relevance	Expenditure, assessed by direct relevance to:	
	Disaster Risk Reduction	**Climate Change Adaptation**
High	$ 202,000 (16 %)	$ 210,000 (17 %)
Medium	$ 8,000 (1 %)	$ 0-619,000 (0-50 %)
Low	$ 823,000 (66 %)	$ 268-887,000 (22-71 %)
None	$ 216,000 (17 %)	$ 152,000 (12 %)
Total	**$ 1,249,000 (100 %)**	**$ 1,249,000 (100 %)**

Source: Summary of Table 7; the ranges for Climate Change Adaptation show the effect of rating greenhouses as Medium or Low.

This ranking is based on an assessment against the stated aim of disaster risk reduction. The project team pointed out that the project document and donor also give considerable attention to climate change adaptation, so this was pursued as one the goals in implementation. Box 2 below discusses these two different interpretations of the project objective and explains why this mid-term review must focus on the stated objective of disaster risk reduction. Should the project parties decide to redefine its objective, the final evaluation could take this into account.

A critical point in the assessment of relevance to climate change adaptation is how to score greenhouses. The main issues are discussed in Box 3 below and much depends on whether or not the village has a reliable supply of water with which to irrigate greenhouses during droughts. In practice there may be an interaction between irrigation investments and greenhouse: if the village has managed to improve its irrigation system so that there will at least be some water available throughout the summer (for example by damming the river to create a storage reservoir), then greenhouses will contribute to climate change adaptation by increasing the value gained from a limited amount of water. However, if the river tends to run dry in drought years, then greenhouse owners will be unable to produce a second crop and so the adaptation benefits of greenhouses will be much reduced.

The circumstances will vary from village to village, and so the relevance of greenhouses to climate change adaptation is scored as “Low-Medium”.

There was also a discussion with the project team about the extent to which the other horticultural interventions (kitchen gardens, citrus nurseries, orchard toolkits and vegetable trellising) contribute to climate change adaptation. The techniques taught to the farmers included various aspects of “climate-smart agriculture”, such as better use of water, new ways to control pests and diseases, and provision of hybrid seeds with increased resistance to drought, pests and diseases. It is not clear whether farmers will continue to buy hybrid seeds in subsequent years, but they may continue many of the other practices. The main issue here

is that these helpful but small-scale interventions do little to address the likely effects of climate change on the production of wheat and other field crops, which are central to household food security.

Box 2: Disaster Risk Reduction, Climate Change Adaptation or both?

DRR or CCA?

The title of the project is "*Adapting Afghan communities to climate-induced disaster risks"* and the stated project objective is *"to improve the preparedness and resilience of selected Afghan communities to climate-induced disaster risks*". Both indicate that ***disaster risk reduction*** is the objective and climate is the context; in other words, *climate change adaptation* is the means*, disaster risk reduction* is the end.

The intended outcome of Component 4 is "*Strengthened institutional capacities to integrate climate risks and opportunities into … policies … and … mechanisms*". This again places a focus on ***climate change adaptation*** as a means towards the end of disaster risk reduction.

In addition, the Strategy section of the Project Document gives considerable attention to climate change adaptation, which is reported as a major concern expressed by the donor during project design. The project team therefore understood climate change adaption to be a major goal of the project and so gave it considerable attention during planning and implementation.

Whilst 17 % of the Component 3 budget has directly addressed climate-induced disaster risks, the majority (71 %) has gone on new or improved agricultural activities that should continue to give an income even during droughts and other climate-related challenges; this can be considered a form of climate change adaptation and a rather indirect response to drought as a slow-onset disaster. Some 12 % of the component budget went on dairy and food processing activities that have no obvious link with climate change adaption or disaster risk reduction: they may increase household income and hence resilience in a normal year but the underlying activities remain susceptible to drought.

This Mid-Term Review must primarily assess the project against its stated objective, and hence judge its activities and achievements by their contribution to "preparedness and resilience to climate-induced disaster risks". However, there is also an understood secondary objective of helping communities adapt to climate change, even where this is not strongly linked to disaster risk reduction. Therefore this review also considers the contribution of project activities to this secondary objective.

Generally speaking, wealth increases resilience, so anything that raises the incomes of poor families should help them to prepare for and cope with disasters, as well as improving access to education, health care, nutrition and adequate living conditions. Therefore any increase in income, whether from agriculture or other sources, will make an indirect contribution to disaster resilience.

Many of the agricultural interventions under this project are less climate-susceptible than rainfed agriculture but more susceptible than most non-agricultural sources of income. The key question for project design is whether interventions to raise agricultural incomes are the most cost-effective means of increasing resilience to climate-induced disasters. That question has not been adequately answered in the project document, and it is the judgement of the evaluators that such interventions are generally *not* the most cost-effective way of achieving the project's overall objective. The specific question of whether greenhouses are a good choice of intervention is addressed in Box 3 below.

Recommendation 1 *Future projects should consider carefully the relevance of agricultural interventions to their overall objective and the needs of the target population; for the remainder of this project, priority should be given to activities and training that directly address disaster resilience.*

The issue of adapting agriculture to climate change is an important one for Afghanistan, even if it is not the primary objective of this project. Donors might wish to consider addressing this in future through a specific project on "Strengthening food security in the face of climate change", with a strong focus on irrigation and cereals.

Most of the "Climate-smart agriculture" approaches used in the livelihoods interventions suffer from two significant limitations:

1) They apply to relatively small areas and do not address production of wheat or other field crops, which account for the large majority of crop land and play a central role in household food security;
2) Most would not be very effective in a drought summer when the usual supply of irrigation water dried up.

The issue of adapting agriculture to climate change is an important one for Afghanistan, even if it is not the primary objective of this project. Donors might wish to consider addressing this in future through a specific project on "Strengthening food security in the face of climate change", with a strong focus on irrigation and cereals.

Recommendation 2 *This &/or future projects should look at large-scale adaption of agriculture to climate change, including cereals. Options include increased irrigation, reduced tillage, drought- & heat-resistant varieties, and water storage to continue irrigating high-value crops during dry summers.*

Box 3: Are greenhouses the right intervention?

Macro and micro greenhouses together account for 50 % of the Component 3 budget, which is five times the share of the next-largest intervention, flood protection. Greenhouses are an intervention that is well known, appreciated by beneficiaries, and with which MAIL now has considerable experience. However, these factors do not in themselves necessarily mean that greenhouses are the best use of resources for the objectives of this particular project. This box draws together findings from various parts of the mid-term review to address the key question of whether greenhouses are the right intervention for CDRRP.

It may seem strange that a project should respond to risks arising from the Greenhouse Effect by building greenhouses, but there is some logic, since greenhouses with drip irrigation allow farmers to continue generating an income during droughts that decimate field crops.

One requirement is that greenhouses should have access to irrigation water even when there is insufficient supply to meet the needs of field crops. Project greenhouses typically include an adjacent water reservoir with earth banks and a plastic liner. It is not clear whether this can store sufficient water to grow a full autumn crop after the river runs dry, though none of the survey respondents reported water-supply problems.

Water supply aside, there are four main issues with greenhouses:

1) ***Cost-Benefit***: Greenhouses are relatively expensive, at around $ 7,000 for macro greenhouses and $ 1,400 for micro greenhouses, and the results obtained are highly variable and usually fall well short of agronomists' projections (see Annex 5). The undiscounted return on investment from a macro greenhouse is estimated at around 5 % per annum, making this one of the least profitable interventions and one that few farmers would replicate from their own funds.
2) ***Coverage***: The high cost of greenhouses means that they can only be provided to a limited number of beneficiaries (1 for every 40-50 households in project communities). Also, experience in Farah province reported by the CBARD economist shows that providing too many greenhouses can result in an over-supply of greenhouse produce and a sharp drop in market prices affecting all vegetable growers. Hence greenhouses can offer a more climate-resilient livelihood for a limited number of community members but other solutions must be found for the rest.
3) ***Food security***: Greenhouses make no contribution to the production of wheat, which is the staple food crop and accounts for the majority of sown area. From a food security perspective, climate change adaptation should focus on issues such as large-scale irrigation, drought-resistant varieties and alternative crops, and water-conserving practices such as minimal tillage.
4) ***Disaster relevance***: Whilst greenhouses can help a small minority of community members to maintain an income during drought, they do not preserve lives or property. No cost-benefit analysis has yet been conducted for life-saving interventions such as flood walls and emergency shelters, nor for wider-impact and more food security-related irrigation projects, but it is clear that using such a large share of the component budget for greenhouses reduces its ability to address climate disaster risk more directly.

Taking all these issues into account, it is the opinion of the MTR team that the project has given disproportionate attention to greenhouses and that its overall objectives would have been better served by allocating more resources to climate-resilient infrastructure and drought-proofing on a wider scale.

Lessons learned from other projects

Several relevant lessons could have been learned from the CBARD projects as CDRRP was developing its interventions, though this information was not available at the time of project design:

- The Mid-Term Evaluation of CBARD-E found that agriculture was a minority income source for Lead Farmers, beneficiaries and non-beneficiaries in Nangarhar province, in line with the findings of the CDRRP baseline survey.
- Section 3.4.3 looks at the cost-effectiveness of different livelihoods interventions and notes that macro greenhouses were already identified as one of the least cost-effective interventions under CBARD, yet they have been repeated in CDRRP and allocated 48 % of the total livelihoods budget to date.
- The Mid-Term Evaluations of both CBARD-W and CBARD-E identified the lack of a proper project database as a significant monitoring weakness, and the same issue is identified here in section 3.4.4.

In at least these three areas, the CDRRP project has apparently failed to learn lessons from earlier projects. However, in other areas, the project has learned from others' experience, for example:

- CBARD-W started building macro greenhouses of 400 m^2 but then found that they were too large for most beneficiaries and so reduced the size to 300 m^2. CDRRP started immediately with the preferred smaller size.
- CDRRP also seems to have found better ways of working on the ground and avoided many of the problems that beset the CBARD projects.

Country priorities

The project is fully in line with country priorities as set out in documents including its "Strategy for Disaster Risk Reduction" and the UNDP Strategic Plan Output 5.3: "Gender responsive disaster and climate risk management is integrated in the development planning and budgetary frameworks of key sectors (e.g. water, agriculture, health, education)". It is also reported that both Province and District governors requested Early Warning Systems during consultation on project design.

The real issue, which came out strongly in discussions and the field survey, is that formal country priorities are not necessarily aligned with the priorities as perceived by many individuals in the departments and communities involved with detailed decision making and project implementation.

Decision-making processes

Project design involved comprehensive consultation with national ministries and with provincial and district governors, followed by detailed planning with Community Development Councils in each selected project community. In addition to consultation with all layers of government, relevant international and national NGOs were sent drafts of the Concept Paper and Project Document and invited to submit comments and attend technical workshops.

Gender issues

The project set gender targets for all individual indicators, including the target that 30 % of livelihoods beneficiaries should be women. To facilitate this, it included the interventions of

food processing and micro-greenhouses, which are aimed almost exclusively at women, together with dairy toolkits and milk-collection centres which reach slightly more women than men. Training also actively involves women, the project offices in each province centre include at least one female staff member to work with women in the communities, and there are female and male Lead Farmers in each project community. At the end of 2020, the project employed 35 staff of whom 8 were women.

However, the selection of livelihoods interventions has resulted in men generally getting the more valuable interventions, such as macro greenhouses. The outcome so far is that women beneficiaries have received 41 % of the interventions but only 24 % of the total expenditure under component 3.2. Addressing this imbalance could be difficult within the cultural context, as only certain interventions are generally considered suitable for women, whilst deliberately recruiting more women beneficiaries than men could encounter resistance from typically male-dominated CDCs.

The mechanism of broadcasting early warning messages from mosque loudspeakers will reach men and women equally. However, female literacy is markedly lower than that of men and relatively few women have smart phones, so the project system of issuing warnings via WhatsApp will be are less effective at reaching women directly. This means that most women are dependent on warnings being passed on by others, whether through the loudspeaker systems or by word of mouth.

The question of whether women are more or less vulnerable to the impact of climate-induced disasters has not been directly addressed in the Project Document, though it notes that "*data on the gender-specific impact of climate change in Afghanistan are largely absent*"[21] and that women's lower level of literature and reduced involvement in community decision-making could potentially result in them being disproportionately affected[22]. A switch away from macro greenhouses, as proposed in section 3.4.3, would automatically result in a rebalancing towards women, without needing to set any overt targets.

[21] ProDoc, p.7.

[22] ProDoc, p.8.

Other areas of concern: Early Warning System

A purely community-based approach to early warning systems, as envisaged in the Project Document, would have only limited effect. In particular, it would be unable to provide sufficiently early warnings of many floods and other weather-related events, where forecasting relies on wide-scale meteorology and hydrological modelling. This became apparent to the project from its initial work and discussions in this area[23], and led to the revised multi-level approach set out in the draft 2020 Annual Progress Report and summarised in section 2.3.2 above. Box 4 presents a short analysis of the main disaster risks to project communities and shows that effective early warning systems will need a combination of local, national and global information and analysis. This suggests that community-based systems are an essential part of the mix, and perhaps the most important element in terms of warning residents and coordinating the immediate response, but cannot in themselves give effective and early warnings against all kinds of predictable disasters.

Box 4: Scope and scale of early warning for different natural disasters

Droughts are slowly-developing, wide-scale disasters. They are driven by multiple factors, only some of which can be predicted and warned about. Soil moisture at the start of the season can be measured locally or estimated from winter precipitation, giving farmers some indication of what and when to plant. Rainfall and evapotranspiration cannot yet be reliably predicted for a whole cropping season, so farmers have to work with this uncertainty. However, farmers can now access the results of global weather models through internet, radio, television or smartphone apps, giving several days' warning of adverse weather to help with tactical decisions.

The supply of surface water for irrigation can in some cases be predicted weeks or months in advance by examining snow cover on the mountains where the rivers rise, requiring a large-scale system and remote sensing data. Supply of groundwater for irrigation is much harder to monitor and model, and here local observations of well levels may be one of the best guides available.

Floods can develop rapidly, flash floods very rapidly, and often affect communities along hundreds of kilometres of a river or multiple rivers. Local observations and weather forecasts can give short-term warnings, but for earlier warning, systems need to look at rainfall, snow melt and hydrology across the entire catchment.

Landslides and ***avalanches*** are sudden, small-scale events where local knowledge and observation are important. However, prediction and warning can be greatly enhanced by global weather forecasting and up-to-date information on the behaviour of slopes in similar areas.

Earthquakes are sudden disasters that vary greatly in scale and severity. There is currently no reliable method of forecasting earthquakes in time to allow for evacuation of a susceptible area.

[23] CDRRP PIR 2019; section G: Ratings and overall assessments: "*Moreover, through field visits, the project also discovered the popular community-based model used by INGOs for flood warnings in Afghanistan had poor performance and low community buy-in because the equipment broke down only one year after installation, the warnings did not come early enough to make a difference and there're no reliable maintenance arrangements.*"

For this component, the following issues of project design invite further attention:

i) ***Modelling capacity***: It is not yet clear the from project documentation how and by whom the necessary modelling will be carried out to convert hydrometeorological observations and forecasts into operational warnings[24]. Considerable work could be needed to develop the models in the first place, but then one unit with a few well-trained people and a national network of information providers could serve the whole country. A logical place for such a unit could be the Afghanistan Meteorological Department (part of the Afghanistan Civil Aviation Authority) but it would need to cooperate closely with ANDMA.

ii) ***Communications routing***: The diagram in the latest Annual Progress Report shows that warning messages would be generated by Provincial Disaster Management Committees and then transmitted to District Disaster Management Committees, which would pass the warnings on to the relevant Community Based Disaster Management Committees, for communication to the local population. Obviously, all relevant levels should receive warnings as quickly as possible so that they can begin coordinating their response, but with modern means of communication a message can be sent simultaneously to all levels by internet, SMS, radio etc. This would save time and reduce the risk that a power cut, communications failure or staffing issue would break the information chain. It should also be noted that warnings might be generated one level higher, at the proposed national modelling unit.

iii) ***Communications resilience***: Even with good communication routing, the system will still need to address the widespread problems of erratic power supplies, patchy cell phone coverage and limited bandwidth, plus the real risk that the very disasters the system aims to manage will damage power and communications just when they are needed most. A resilient system needs resources such as solar panels, standby generators and batteries, as well as HF and VHF radio to offer alternative means of communications and build in redundancy. The UN system has extensive skills and experience in this area and could help ANDMA and others to identify needs, which the project could then help to address.

iv) ***ANDMA involvement***: Whilst ANDMA is represented on the Project Board it is not a major beneficiary of the project and most of the day-to-day work is done through MAIL. To make this component of the project a real success, it might be necessary to strengthen the relationship with ANDMA and to provide it with concrete assistance at multiple levels. Collaborative work now ongoing in the two project provinces is a good step forward, and it will be important to ensure that lessons learned are applied nationally.

[24] For example, meteorological data can say how much rain has fallen and is forecast to fall on a given catchment. However, translating this into an operational assessment of whether and when a particular community will be hit by a flood requires detailed knowledge of the whole catchment area and its hydrology.

v) ***Scale and vision***: Whilst the project now plans to support Disaster Management Committees in two provinces and six districts, most of its attention is still focussed on 30 Community Based Disaster Management Committees, representing just 0.1 % of Afghanistan's 30,000 rural communities. Given that most or all of these will have a need for early warning and disaster response systems, the project could use its 30 selected communities as pilots to develop cost-effective practical approaches and training materials, to be rolled out across the country over future phases and projects. In this way it would help to develop a joint vision with ANDMA, other national ministries and institutions, and international partners including the EU and World Bank[25].

vi) ***Sustainability***: In addition to the limited impact of Community Based Disaster Management Committees without a wider supporting structure, the project approach so far is very reliant on voluntary participation of community-based committees and on warnings and weather forecasts sent out by project staff. The project plans to start working with District and Province Disaster Management Committees but it is too soon to judge how successful and sustainable this will be. As noted in section 3.5 below, there are serious questions about the sustainability of this activity after the end of the project. The national vision for early warning systems needs to consider long-term funding as well as wide geographical coverage, probably with a combination of national and international finance.

Recommendation 3 *The project should review its approach to Early Warning Systems, together with ANDMA, AMD, MoEW and other institutions, and seek a more sustainable, comprehensive and effective model. It should increase cooperation with and support provided to ANDMA.*

A number of possible actions that could arise from such a review and be supported by the project are set out in Box 8 under the section on *Budget revisions* in 3.4.3. Experience from Bhutan, which was apparently raised by Province and District governors during project design, could also be taken into account.

3.1.2 Results Framework and Logframe

Logframe and objectives

The Results Framework focusses on what is easy to measure rather than on what matters. It records the immediate outputs of project activities, such as people trained and documents produced, rather than on their impacts[26]. The Project Objective is currently stated as "*to improve the preparedness and resilience of selected Afghan communities to climate-induced disaster risks*". However, "preparedness" and "resilience" are neither defined nor measured, so this is not a SMART objective.

[25] In 2018, the World Bank published "*Strengthening hydromet and early warning services in Afghanistan: A road map"*, which develops options for a comprehensive approach to hydro-meteorology and early warning systems. It is understood that this may shortly be followed up by an operational project.

[26] This is not specific to the CDRRP project but can be seen across many projects by many different donors and is often reflected by the emphasis on disbursement in their reporting formats. Projects are obliged to monitor progress against the targets set in their Results Framework or Logframe, so if their core table emphasises activities rather than overall impact, then this will inevitably propagate through the entire monitoring and reporting structure.

It is recommended that the Project Objective be reformulated as "*to reduce the damage to lives and livelihoods caused by climate-induced disasters*". The Results Framework should be extended to include two quantitative measures of overall impact:

- *The reduction in damage to lives, expressed as lives lost, life-years lost or disability-adjusted life-years lost, comparing with-project against without-project*.
- *The reduction in damage to livelihoods, expressed in monetary terms, again comparing the with-project and without-project scenarios*.

This approach would be fully in line with the Sendai Framework for Disaster Risk Reduction, as the first four of its seven targets are to reduce disaster mortality, the number of affected people, economic losses and infrastructure damage. Quantitative targets should be set for each of these measures, in terms of percentage reduction in damage compared to nearby non-project communities affected by the same disasters. Absolute targets cannot be set because future losses due to disasters cannot be predicted.

Recommendation 4 *The project objective should be reformulated as "to reduce the damage to lives and livelihoods caused by climate-induced disasters".*

Measuring disaster damage to life and livelihoods will require new monitoring tools. The idea of analysing disaster impacts and responses has already been introduced through project training courses, as illustrated in Figure 3 below:

Figure 3: Example of disaster analysis from CDRRP training workshop

An effective approach to monitoring the project's impact on disaster damage would be to carry out a rapid assessment every time a project community is struck by a disaster. A number of neighbouring communities should also be assessed, to see whether project support had indeed made participating communities more resilient. For floods, assessment could look at the nearest one or two communities immediately upstream and downstream; for droughts and earthquakes a number of nearby communities could be surveyed.

Box 5 below presents a possible draft of a disaster reporting and assessment form. There is also a standard form developed by OCHA and IOM, which goes into greater detail in assessing immediate needs but does not address specific issues of preparedness and warnings that are relevant to the CDRRP project. The project team could discuss with OCHA to investigate options for a complementary approach and information sharing; if this would be difficult in practice, then the project might proceed with its own form as a core part of its monitoring and evaluation system.

Box 5: Initial draft of a disaster reporting and assessment form

Disaster Reporting & Assessment Form

Location: Province …… District …… Community ……

Relation to project: Project community ☒ / Upstream ☒ / Downstream ☒ / Nearby ☒

Reported: Person …… Position …… Date ……

1. DISASTER

Disaster: Flood ☒ / Landslide ☒ / Earthquake ☒ / Other……

Timing: From date …… / time …… To date …… / time ……

Region affected: < Could range from part of one community to multiple provinces >

Magnitude: < Describe and as far as possible quantify the disaster itself >

2. PREPAREDNESS

Early Warning System: Established ☒ Tested ☒ Notes ……

Disaster Plan: Established ☒ Tested ☒ Notes ……

Community Shelter: Completed ☒ Tested ☒ Notes ……

Supplies provided: ……

Training provided: ……

3. WARNING

Was a warning given? Y ☒ / N ☒

If Y, how? If N, why not? ……

If warning given, was the warning passed on to the whole community? Y ☒ / N ☒

If Y, how? If N, why not? ……

If warning given & passed on, was it widely acted on? Y ☒ / N ☒

If Y, how? If N, why not? ……

4. IMPACT

No. homes: Destroyed …… Damaged …… Typical extent of damage ……

Other affected infrastructure:

Item …… Damage ……

Item …… Damage ……

Item …… Damage ……

Rainfed land: Area affected …… Damage ……

Irrigated land: Area affected …… Damage ……

No. livestock: Dead …… Missing ……

Lives: Dead …… Seriously injured …… Slightly injured …… Missing ……

Livelihoods: Homeless …… Lost all livelihood …… Lost part of livelihood ……

5. RESPONSE

Search & rescue: Not required ☒ / Ongoing ☒ / Complete ☒ / Notes ……

Medical assistance: < What, where & by whom? >

Emergency supplies: < What, from whom & to whom? >

Outstanding needs: ……

The relevance of interventions to improve household incomes has been discussed in section 3.1.1 above. Given that the project has set this as an objective, it needs mechanisms to measure the impact on incomes. Here the most appropriate tool is Gross Margin analysis of project interventions compared to the realistic alternatives, as implemented under both CBARD projects. The CDRRP project has not yet implemented regular monitoring but small yield survey was conducted in late 2019 and other field surveys are now under design for implementation in 2021. A range of data available so far on livelihoods interventions are presented in Annex 5 and summarised in section 3.4.3.

Recommendation 5 *Mechanisms should be established to measure the impact of disasters on project and comparator communities, so as to assess the overall effectiveness of the project.*

Recommendation 6 *The financial impact of livelihoods interventions should be systematically monitored and priority given to the most cost-effective interventions*[27]*.*

Recommendation 7 *UNDP should continue to monitor the impact of long-term interventions beyond the life of the original project and use the findings to inform design of future projects; a cooperative multi-donor approach to monitoring and cost-benefit analysis of common interventions might be effective.*

Other proposed amendments to Results Framework

The target for output 4.1 is that 60 Community Development Plans should be strengthened to incorporate climate change issues. The project is working in 30 communities, in each of which it has conducted "Hazard and Risk Mapping and Vulnerability Assessments", appointed and trained Lead Farmers and launched interventions. Given that the project has neither the information base nor the local contacts to work effectively on Community Development Plans outside its 30 selected communities, this target should be amended from 60 to 30.

The target for output 4.3 is that 4 "lessons learned and best practices" should be shared through regional processes "(e.g. Heart of Asia – Istanbul Processes and other processes)". Apart from the difficulty in defining what constitutes one lesson learned, the 2020 Project Implementation Review reported that "*The project finds this target unrealistic. The Heart of Asia-Istanbul Process is concerned with more general and policy level discussions and project lessons learnt aren't suitable for this platform. The project also explored other opportunities, such as the COP meeting in 2019, but found those unsuitable too. It is planning to request that this indicator be revised following the mid-term evaluation and either replaced with an indicator that can better reflect its work under this outcome or increase the targets for another indicator.*"

The Covid-19 pandemic has made regional meetings even less appropriate and so it is recommended that this be replaced by a virtual workshop convened by the project with national and international participants.

Recommendation 8 *The quantitative target for Community Development Plans should be amended from 60 to 30 and the regional workshop should be replaced with a virtual workshop convened by the project.*

[27] The project is currently designing mechanisms to measure impacts on livelihoods.

Broader development and gender issues

With the caveats given above, the current Results Framework already captures the main development impacts. However, if further development of the Early Warning Systems approach did lead to an effective integration of national and community approaches, it might serve as a valuable example for other areas.

The comprehensive inclusion of gender issues in project design, implementation and monitoring effectively treats gender equality and women's empowerment as an additional high-level objective, rather than as an intermediate step towards building resilience to climate-induced disasters[28]. This is fully in line with national and UNDP strategic priorities and could in principle be incorporated into the overall Project Objective. A formulation that reflects the *de facto* goals of the project could be:

- *The objective of the project is to reduce the damage to lives and livelihoods caused by climate-induced disasters, and to fully involve women in this process.*

3.2 Survey findings

The mid-term review conducted a field survey of 111 Lead Farmers, beneficiaries and non-beneficiaries in 21 project communities across Nangarhar and Jawzjan provinces. Annex 4 presents the survey design, questionnaire and detailed results, which are referred to at relevant points throughout this report.

The survey covered many aspects of intervention communities, including the nature of community households, strengths and weaknesses of project implementation, the outcomes of project interventions and their impact on enhancing people's ability to mitigate climate induced risks. Therefore this section presents a brief summary of the main survey findings before resuming assessment according to the standard GEF template.

Reliability of results

- Wherever possible, respondents were interviewed individually to avoid any peer pressure that might bias their responses. All respondents in Jawzjan and several in Nangarhar were interviewed by telephone, which ensured individual interviews.
- Few farmers keep records, so data on crop yields and prices depended on the respondents' recall, whilst the parallel use of the lunar and Gregorian calendars led to some additional uncertainty on timing. Recall errors appear to be largely random, with no obvious pattern of over- or under-stating figures from the past.
- However, there was some evidence of respondents saying what they thought the interviewer wanted to hear, for example when they expressed satisfaction with activities which had not yet taken place, or the almost universal reply that they thought others would copy their example.

[28] The distinction can be illustrated with a hypothetical example: If analysis showed that that a given amount of investment would be more effective in reducing disaster risk if targeted at men rather than women, would the project be happy to target men? If the answer is Yes, then gender targeting is an intermediate objective on the way to the overall objective of reducing disaster risk. If the answer is No, then gender equality is an objective in and of itself.

The same logic is applicable wherever it is not immediately clear if something is an intermediate or an ultimate objective. Here the MTR team is not commenting on how gender should be included in this particular project but simply checking the internal consistency of the Results Framework.

- There are cultural issues around a male interviewer interviewing women, so in many cases, female beneficiaries were represented by their husband, father or son.

Community households

- The large majority of survey respondents were farmers, including Lead Farmers and project beneficiaries who had been selected because they were farmers. 35 % of respondents said that farming their own land was their main source of household income, with the remaining 65 % saying that they had multiple income sources. For them, farming for others on a daily wage was the major source of income, followed by non-agricultural labour[29]. Non-agricultural employment was regarded as "not easy to find" by majority of respondents despite their efforts to find one. Neither remittances, non-agricultural businesses nor pensions were reported by any significant number of respondents as their source of income.
- The education level of respondents was low across the different intervention communities, this is in line with the country context, where education of the rural population is generally low. From the survey respondents, 37 % had no education, 21 % had completed secondary school and 19 % had completed high school. University education was completed by 16 % of respondents, the majority of whom were Lead Farmers for the project. Religious school (Madrasa) education was attained by 7 % of respondents.

Project implementation

- The project seems to have been successful in its aim to recruit Lead Farmers who had higher education compared to the general educational level in these communities, and most of the Lead Farmers had an educational degree in agriculture. Also, the project managed to hire equal number of female Lead Farmers, which is essential in order to work closely with female beneficiaries of the project[30].
- The survey results confirm that the quality of tools and other supplies provided to beneficiaries for livelihood interventions were good and that beneficiaries were satisfied with them. Respondents universally agreed that packages for each livelihood intervention supported were complete and covered almost all essential needs for the first year (the few exceptions said that they needed more seeds or fertiliser).
- The infrastructure projects supported by the project were regarded as valuable and helpful. The selection of infrastructure project sites and procurement of materials was seen as generally fair, and as being done in close consultation with the community council in a way that ensured that the infrastructure addressed the real risks and benefited all residents equally.
- Training provided by the project was aligned with beneficiaries' requirements but was delivered mainly to Lead Farmers, who would then provide training to beneficiaries of

[29] Over recent years the international evaluator has looked at rural household income ten countries (Albania, Bosnia, Kosovo, Georgia, Iraq, Nepal, Macedonia, Montenegro, Serbia and Afghanistan) and so far failed to find a single country in which agriculture is the main source of rural income.

[30] Whilst the project was largely successful in identifying well-educated Lead Farmers, in some communities it was unable to find even a single literate person willing and able to serve in this role, with this being a particular issue for female Lead Farmers (reported by project to MTR team).

specific interventions. Some concern was expressed that most of Lead Farmers have only received limited training themselves, and in the opinion of the MTR team, it might be better if project specialists or experienced extension workers could go into the communities to train beneficiaries on specific topics and skills.

- Lead Farmers and project beneficiaries have a significantly higher understanding of climate change and its impacts compared to non-beneficiaries in the project communities. This indicates that workshops in this area have been effective, but that the awareness-raising component has not yet had a large impact across these communities, especially for women who typically do not have access to smart phones or and internet.
- The project's early warning system, currently based on distributing weather warnings via "WhatsApp" groups, is the first of its kind in these communities, and no organisation or project had previously established any kind of early warning system in any of the 21 surveyed villages. Respondents added that the system established by CDRRP is effective, and the majority expressed trust in the information shared with them. However, non-beneficiaries, especially women, seem to be at a disadvantage in terms of receiving early warning messages and other information in a timely manner.

Project outcomes

- The early warning system has so far proven effective on one occasion: in August 2020 when warning issued by the project helped save lives in two communities of Khewa district in Nangarhar when they were struck by floods. The system has not yet been called upon to warn of imminent disasters for any other communities or occasions.
- Beneficiaries who have received livelihood support see an increase in their agricultural production and income (reported in detail in Annex 4 and analysed further in section 3.4.3).
- Marketing was not seen as a problem for any of the dairy interventions, and rarely for the greenhouses, but the majority of outdoor vegetable producers (beneficiaries of trellising or kitchen garden packages) reported marketing problems.

Interviewer's impressions

1. The project has focused on making sure that the interventions are based on the needs of the communities, concentrating more on livelihood support than on infrastructure or awareness raising about climate change.
2. Climate change is a new topic for most people in rural Afghanistan. Project communities tend to be more interested in interventions that could alleviate poverty and food insecurity, and do not see climate change as a top concern. The project has done a good job in raising awareness and curiosity amongst Lead Farmers and beneficiaries, but more work is needed to raise awareness across the whole community.
3. The project has managed effectively to involve women as both Lead Farmers and direct beneficiaries of livelihoods support, but the sustainability of this is uncertain. A strong follow-up mechanism may be needed to ensure that female Lead Farmers actively engage with women in the community to raise awareness of climate change,

establish communication channels for women and enhance their capacity on various development topics such as gender, health and economic growth.

4. Overall, the project has earned a positive reputation amongst its target population. Project beneficiaries are generally satisfied with the technical and administrative support they receive, and non-beneficiaries are eager also to benefit from the project and improve their incomes.

3.3 Progress towards results

This section analyses progress against the quantitative targets set for this point in the project and forms an assessment as to whether the project is on track to reach its final targets by September 2022. It also identifies a number of remaining barriers to be overcome or worked round.

3.3.1 Analysis of progress towards outcomes

Progress Towards Results matrix

The "Progress Towards Results matrix" is shown on the following page (repeated at the end of the Executive Summary). Ratings are colour-coded as follows:

Green = Achieved	Yellow = On target to be achieved	Red = Not on target to be achieved

Table 9: Progress towards results matrix

Outcome, Output, Indicator, Sub-indicator	Baseline level	Mid-term target	Final target	Level in 2020 PIR	Level at MTR	Rationale
0. General						
0.1. EWS						
No. provinces with EWS	0	0	2	0	0	See Component 2 below.
0.2. Provincial Action Plans						
No. Provincial Climate Action Plans	0	0	2	0	0	See Component 4 below.
0.3. Beneficiaries						
No. direct beneficiaries						
Total	0	3,000	15,000	23,688	31,038	Target already exceeded.
Female	0	1,500	7,500	11,512	15,103	Target already exceeded.
1. Disaster risk reduction measures						
1.1. Awareness raising						
No. people reached						
Total	0	7,000	25,000	12,980	56,381	Target already exceeded.
In person	0	300	1,000	1,199	1,711	Target already exceeded.
In person, female	0	150	500	488	619	Target already exceeded.
1.2. Training						
No. trained in hazard mapping						
Total	0	100	200	855	855	Target already exceeded.
Female	0	20	40	364	364	Target already exceeded.
1.3. Risk mapping & vulnerability assessments						
No. assessments	0	15	30	15	30	Target already exceeded.
2. Early warning systems						
2.1. Hazard monitoring systems						
No. communities with early warning info	0	7	30	0	0	CBDMCs formed. Training given. EWS equipment procured.
2.2. Communication systems						
No. quarterly tests	0	14	60	0	0	Tests planned for 2021 after equipment installation.
2.3. Response mechanisms						
No. DRR plans						
Formulated	0	7	30	0	30	Target already exceeded.
Tested	0		30	0	0	First tests planned for 2021 once EWSs operational.
3. Resilient buildings & livelihoods						
3.1. Climate-resilient buildings						
No. resilient structures	0	10	20	14	22	Target already exceeded.
3.2. Diversified livelihoods						
No. livelihoods beneficiaries						
Total	0	100	1,000	553	993	Target already exceeded.
Female	0	30	300	192	410	Target already exceeded.
Kuchi households	0	5	50		36	Likely to be met if interventions continue at current pace.
4. Climate-aware policies						
4.1. Provincial Climate Action Plans & Community Development Plans						
No. plans						
Community	0	30	60	0	30	Proposed to amend target to 30
Provincial	0	0	2	0	0	Planned for 2022.
4.3. Trained policymakers						
No. trained in adaptation strategy						
Total	0	40	160	0	0	Planned for 2021.
Female	0	8	32	0	0	Planned for 2021.
4.4. Lessons learned & shared						
No. practices shared	0	2	4	0	0	Propose to replace with national workshop in 2022.

GEF Tracking Tool

All quantitative values in the Tracking Tool were zero or blank at baseline, apart from 12 people trained (all male). Values at MTR are as in the ratings table above, with two additional quantitative items:

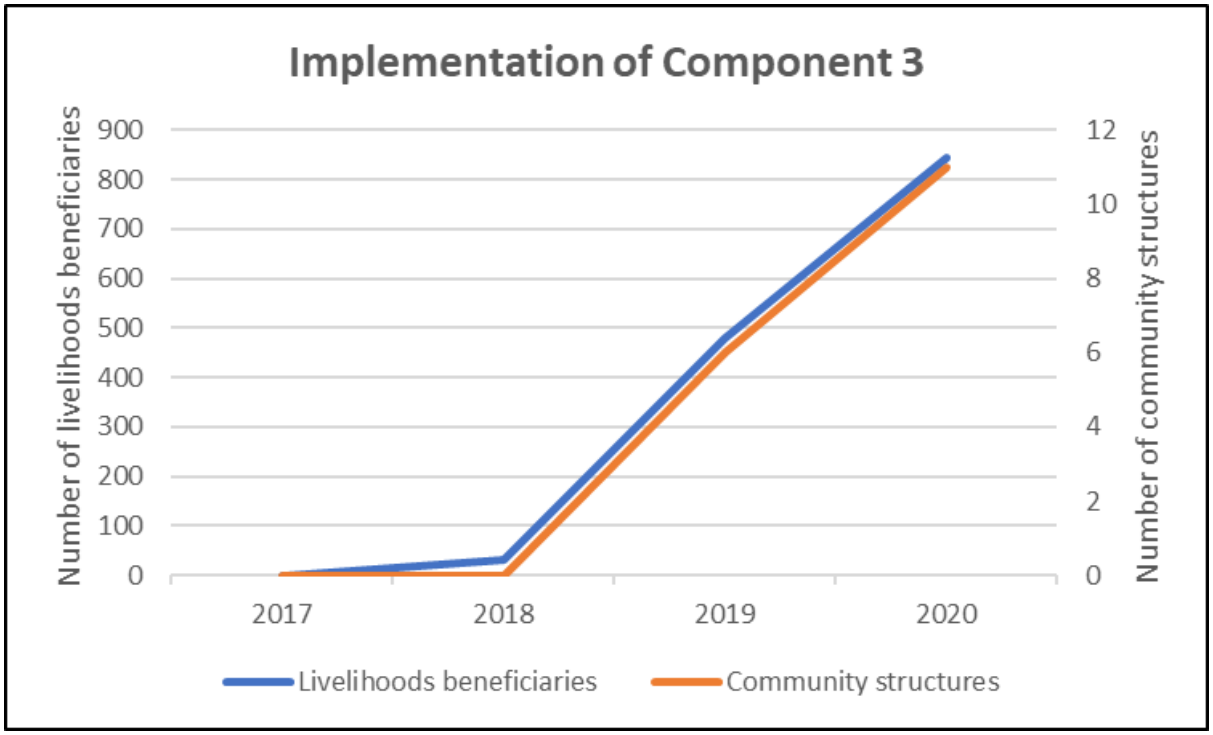
- 2,776 ha of agricultural land covered
- 1 institutional partnership established or strengthened (ANDMA).

The validated GEF Tracking Tool file has been provided as a separate attachment.

Quantitative progress on Component 3

The infrastructure and livelihoods interventions of Component 3 represent over half of the project's operational budget and can be directly quantified. Figure 4 shows how progress in both these areas took off in 2019, with the two sub-components proceeding in parallel:

Figure 4: Implementation of infrastructure and livelihoods interventions over time



Source: Project database to end 2020

Quality of outputs

The system of monitoring achievements against the Results Framework is simple and quantitative; for outputs such as plans it reports how many have been completed, without any assessment of their quality. Box 6 gives one specific example of an output produced under the project under Component 4 against the Outcome Indicator "*Sub-national plans and processes (Provincial Climate Action Plans and Community Development Plans) developed and strengthened to identify, prioritise and integrate adaptation strategies and measures*".

Box 6: Integration of climate change into Community Development Plans

The ***Community Development Plan*** for Pole Saracha community in Behsood district of Nangarhar originally began as follows:

Vision:

We want the basic services for the above mentioned village's residents in the upcoming five years, including: Electricity, Safe Water, Main Roads, Job opportunities, good education for male and female and Appropriate Facilities for Health in order to have comfortable and united Life.

After integration of climate change the section became:

Vision:

We want the basic services for the above mentioned village's residents in the upcoming five years, including: Electricity, Safe Water, Main Roads, Job opportunities, good education for male and female and Appropriate Facilities for Health in order to have comfortable and united Life. And also we all the participants decided that in each project implementation should consider the issue of climate change seriously in order to prevent further disasters.

The new climate-specific paragraphs added to other section of the plan were:

6. Members of the community became familiar and got sufficient information about map of the risks of events caused by climate change.

7. The appropriate site for each project was selected based on a map of the risks of events due to climate change.

8. The rescuing location for floods and events are identified based on climate change.

4. Families affected by climate change

Floods 50% Drought 0% High temperature 10% Landslide 0% falling down the snow 0%

And also men, women, child, young, and elders are all affecting by events caused by climate change, so women must also play their part to the best of their ability for preventing such problems, in order to a major catastrophe is averted.

6. Collaborate with those projects that are working on climate change

7. All members of the community are obliged to help each other for reducing the risk of events caused by climate change and to inform each other for probable occurrence of risk

Digging deep wells, building reservoirs and delivering pipes to every home or neighborhood.

Climate change: which is a global problem, all members of society (men and women) must work together to reduce the risk of major disasters. In addition, the government must oblige all relevant climate change ministries to play their part in mitigating the risk of climate change at the national level. (Paragraph already included in original version of plan).

The three actionable outcomes of this exercise were to check that the proposed locations for project interventions against recognised disaster risks, to identify a rescue location in case of flood or other disasters, and to ensure that wells were sufficiently deep. Whilst these are undeniably useful, it could be questioned whether the exercise constituted the comprehensive introduction of climate change adaptation into community development planning.

Similar issues will arise in other areas of the project where, without some objective method of assessing the quality of documents produced, it is hard to judge whether or not the project has really achieved the target outcomes.

3.3.2 Remaining barriers to achieving the project objective

Barriers have been identified in the following areas:

Security

The security challenges have been noted from the outset and included in the project's Risk Log. Security was identified as a "Critical risk" in the 2020 Project Implementation Report[31] and directly affected implementation of the survey for this Mid-term Review[32]. The mitigation measures set out in the Project Implementation Report (see footnote) and other project documents remain appropriate.

Covid-19

2020 APR: "The major challenge CDRRP faced in 2020 is the pandemic, which caused delays in procurement and project activities. As a result, the project had to postpone the emergency drills for the early warning systems as well as the training for government officials to identify and evaluate adaptation measures."

"Covid-19 pandemic has negatively affected the project implementation. At the beginning of the pandemic, the government placed drastic measures to control the spread of the virus, such as blocking roads between districts and the provincial centres and working from home orders. Measures started to ease off after a couple of months, allowing staff to work from the office some of the time. As many staff do not have adequate internet at home and the central procurement unit was slower to respond to requests than usual, the project faced delays in procuring tools needed for livelihoods and early warning interventions. For instance, the disaster response toolkit could not be procured before the end of the year as planned and as a result the project did not fully achieve the target for indicator 2.3. Many local markets were also closed for various periods of time, affecting the business of certain livelihoods beneficiaries, especially those working with value-added products such as dairy products, pickle, and jam as the demand for them is less than cereals and vegetables during a crisis like the pandemic.

[31] Security remains a high risk for this project. For instance, late last year the fighting between the Taliban and the government force and several newly establish Taliban check points along the Balkh-Jawzjan highway made it difficult to travel in certain areas in Jawzjan province. In some target communities close to this highway, construction had to be paused several times.

The main mitigation measure is to work closely with local communities in monitoring local security situations as they are knowledgeable of the dynamics on the ground and their support could sometimes protect project staff and construction workers from being attacked. The project also makes sure that all security measures are being adhered to strictly and any violations of security precautions are being reported and dealt with swiftly.

[32] The National Evaluator could not safely travel in Jawzjan province so all survey interviews there were conducted by phone.

As restrictions started to lift up, the project team was able to carry out activities while taking precautions, such as wearing masks and breaking up big gatherings for training into smaller ones."

Power and communications

Afghanistan as a whole currently suffers from frequent power cuts, even in the big cities. The "Issue Log" in the Annual Progress Reports notes that the Nangarhar office bought a generator in September 2018 to solve this problem[33]. Whilst the project offices are now largely insulated from this problem and the mosque-based loudspeaker systems will be powered by solar panels, it could still pose a significant challenge for other parts of the early warning system, for example, if an urgent message needs to pass through a province or district office where the power and wi-fi router are down.

Mobile phone coverage is also weak in many rural areas, adding an additional obstacle to the early warning system and operation of the WhatsApp groups.

Procurement

Procurement is carried out by MAIL, with cross-checking by project staff and UNDP staff. The process can be quite lengthy, in part because of the multiple steps involved and in part because some cases have to be referred back due to incomplete or incorrect documentation. In one case, procurement delays led to a project activity being cancelled[34].

Procurement staff were initially shared with the CCAP project but CDRRP hired its own full-time Procurement Officer in September 2020, which has helped a lot. In addition, most of the Lead Farmers are young, educated and enthusiastic and help to ensure the quality of documents before they are submitted. The provincial teams check the documents carefully before sending to Kabul and the security situation usually allows them to travel to project communities when issues need to be resolved on the ground.

Recruitment

Project staff are also recruited by MAIL through government recruiting procedures. There have been confirmed examples of staff being recruited who do not meet all of the criteria laid down in the job description (see Box 7 below).

Recruitment can also take a long time. As one example, the project's original Climate Change Specialist resigned in September 2019 and the project could not start the recruitment for this position until early 2020 due to complications associated with revising the HR plan and obtaining approval in the board meeting, with the new specialist finally starting work in

[33] CDRRP APR 2020 (draft); Issues log.

[34] Section V of the 2019 Annual Progress Report states "Work for a multi-purpose sub-project in Nangarhar has been cancelled because the procurement took more than half of year and, during this time, the Citizen Charter programme started a sub-project at the same site. The procurement took this long because CDRRP shared its procurement staff with two other projects and this caused many delays. The project plans to recruit dedicated procurement staff next year.".

September 2020. This resulted in indicator 4.2 being delayed, rather than being achieved in 2020 as planned[35].

Box 7 below gives three concrete examples of recruitment of technical staff. In each case, the job descriptions were rather vague and did not specifically require training and experience in areas directly relevant to the project. This creates scope for favouritism or simply poor selection; it is often hard in practice to demonstrate whether or not these occurred, though in one of the three cases, the selected candidate appeared to lack even the specified minimum background.

Box 7: Recruitment examples

The MTR team reviewed three examples of recruitment of technical staff, looking at the published job specifications and the CVs of the selected candidates to identify strengths and weaknesses of the process. In each case, recruitment was conducted by MAIL with support from the CDRRP team based there.

Eligibility criteria

In all three cases, the eligibility criteria did not require training or experience in the specific areas to be covered by the post.

Job description and background

In one case, the job description made clear what the kind of background that would be required.

In the second case, the job description emphasised only part of the required background.

In the third case, the job description required a background in agriculture rather than in the subject matter of the post.

Suitability of selected candidates

in two cases, the CVs of the selected candidates indicated that they met the specified and implied requirements.

In one case, the selected candidate did not appear to have the necessary skills or experience.

The 2019 Audit Observations report observed that proper hiring procedures were not followed in the cases of six named staff members, with 1-4 of the required documents missing. It also noted that the project had no proper procedure for the hiring of interns.

The project accepted the report's recommendations and agreed to recruit a National HR Officer to ensure proper procedures are followed, and to draft Standard Operating Procedures for the hiring of interns.

Staff capacity

Even with perfect recruitment procedures, the project could only draw on the pool of qualified, interested and available people in Afghanistan. Climate change is a highly complex subject and there are very few experts in the country with detailed knowledge and experience in this area, which compounded the recruitment problem noted above. The quality of

[35] CDRRP APR 2020 (draft); section V. Issues.

training and planning documents supported by the project may well have suffered due to lack of expertise in this area (see, for example, Box 6 on *Integration of climate change into Community Development Plans*). Part of the response would be for the project to make greater use of international expertise and training courses for Component 4 on "Climate-aware policies".

Recommendation 9 *The project should use international experience and training resources for preparation of the Provincial Climate Action Plans and invite feedback from relevant national and international organisations.*

Staff capacity has also affected project monitoring and information systems, with systems sometimes having to deviate from established principles of database design in order to encourage staff to enter certain data that might otherwise be overlooked. This stems in part from limited IT skills amongst many of the staff. A good response here would be a robust project-management database, as proposed in section 3.4.4.

Project management has expressed concerns about the capacity of three of the technical staff. Whether this arose from weaknesses in the recruitment processes, the limited pool of experienced and talented staff on which to draw or a combination of both, the result is that staff capacity has limited the ability of the project to work as quickly and effectively as it hoped.

These *qualitative* issues of staff capacity are compounded by *quantitative* issues particularly in relation to technical staff:

Technical staff resources

The budget in the Project Document allocated funds for full-time local employees predominantly in organisational and supporting roles. Actual staffing varied throughout the project in response to recruitment, resignation and re-allocation, but the original plan was as follows:

The full-time management and support team at UNDP in Kabul was planned as 6 people:

- 1 Programme Officer
- 1 Programme Finance Analyst
- 2 drivers
- 1 guard
- 1 cleaner

The full-time project team at MAIL in Kabul was planned as 11 people, of whom only the last is a technical specialist:

- 1 Project Manager
- 1 Deputy Project Manager
- 1 Finance Officer
- 1 Procurement/Admin Officer
- 2 guards
- 2 cleaners
- 2 drivers
- 1 National M&E/Knowledge Management Specialist

The full-time team in each Province office was planned as 8 people, none of whom is a technical specialist:

- 1 Provincial Project Coordinator
- 1 Provincial Finance Officer
- 1 Procurement/Admin Officer
- 1 driver
- 1 guard
- 1 cleaner
- 1 Community Mobiliser
- 1 Gender/Social Officer

Technical expertise was planned to come almost entirely from short-term assignments, using a mixture of international and national staff.

The technical team in Kabul was planned as:

- International DRR Training Specialist (45 days)
- International Disaster Mapping Specialist (45 days)
- International Climate Policy and Planning Specialist (45 days)
- International Climate Change Economics Specialist (45 days)
- International Climate Change Communications Specialist (120 days)
- National Climate Change Communications Officer (3 months per year)
- National DRR Consultant (8 months)

The technical team in each province office was planned as:

- National Resilient Infrastructure Engineer (8 months)
- National Resilient Agriculture Officer (8 months)
- National Alternative Livelihoods Officer (8 months)

Thus of the total 1,800 staff-months of national employees and consultants:

- 888 staff-months (47 %) were for support staff
- 876 staff-months (47 %) were for organisational staff
- 116 staff-months (6 %) were for technical staff, albeit supported by 300 days (around 14 staff-months) of international technical specialists

The allocation of technical staff resources was simply inadequate to design and implement each of these activities to maximum effect, even with the amendments to the Human Resources Plan that the project was able to make over time. Whilst donors understandably want to limit the share of budget spent on project staff, the requirement for technical inputs depends more on the number of issues to be addressed than on the amount of funds to be disbursed. CDRRP is a highly technical project that works in several different areas including disaster response planning, early warning systems, climate change adaptation and communication, agriculture and food processing, irrigation and infrastructure, across two provinces. Each new area, whether thematic or geographic, brings new staff requirements.

The staff requirements for procurement, administration and field monitoring, on the other hand, are more directly proportional to the number of beneficiaries.

The technical staff limitation that affected CDRRP could have been avoided in two or three different ways:

- The project could have selected 30 communities from one province, thereby saving 6-8 staff posts and the associated costs of maintaining a second provincial office.
- The number of different technical areas could have been reduced and/or the number of technical staff increased to ensure that each area was properly covered. Reducing the number of technical areas would require giving careful thought to the project's overall objectives and priorities, as discussed in section 3.1.1 above on *Project design*, and might have resulted in a project with fewer components. Technical requirements within a project component could be reduced, and quality improved, by selecting a smaller number of different interventions and giving greater attention to each (a recommendation made in the CBARD Mid-Term Evaluations).

Recommendation 10 *Future projects should ensure that they have sufficient technical resources to design and implement each technical component well. Where the technical staff budget is a binding constraint, the project should limit the number of different components and interventions to avoid spreading its resources too thinly.*

Recommendation 11 *Projects should avoid working in multiple provinces if they do not have sufficient resources to serve all accessible target beneficiaries in even one province.*

As an example of this approach, the project could have decided to focus on disaster preparedness, early warning systems and disaster-resilient infrastructure, dropping Component 3.1 (livelihoods) and Component 4 (climate-aware policies). It could have selected one province and all of its districts that were sufficiently secure and accessible for effective project operations. Within this, it could have worked with the Provincial Disaster Management Committee and with District Disaster Management Committees in each selected district, plus a selection of pilot communities in each of these districts to develop the community-based systems. Assuming the project was successful, the partners could then seek additional funding to extend to all relevant communities in this province, before replicating in other provinces. The main work at national level would have been with ANDMA to design the overall framework and to access national and international data and modelling for disaster forecasting.

Alternatively, the project could have taken a different approach, focussing on adapting rural livelihoods to climate change and skipping the disaster-related elements.

A third approach would have been to maintain the thematic diversity of the four components, enlarge the technical team to support it, and select just one of the two provinces for the initial project.

Differing priorities

Whilst the risk of climate-induced disasters is real, it is not the top priority for most community members or government institutions. This has been apparent to the team in their

dealing with government institutions, and it the field survey gave the clear impression that community members were more interested in interventions that would give an immediate increase in income, rather than in preparing for disasters that might or might not occur at some unknown point in the future.

3.4 Project implementation and adaptive management

Given the strengths and weaknesses of the original project design, this section examines how effectively the project management has used its resources and responded to the various challenges that it has faced along the way.

3.4.1 Management arrangements

Adaptive management

Successful examples of adaptive management can be found throughout the project, for example:

- The 2018 Annual Progress Report details the replacement of two insecure districts in so that project implementation could proceed[36].
- The 2019 Project Implementation Report details how the approach to early warning systems was modified in response to obstacles and observed weaknesses[37].
- The 2020 Annual Progress Report details three practical adaptions to interventions in response to lessons learned[38].

[36] CDRRP APR 2018; Annex 4: Issue log.

Description: *Insecurity in Jawzjan: The security assessments for Jawzjan conducted in December showed that two out of the three target districts, Qarqin and Mardyan, were too insecure for implementing CDRRP.*

Status: *CDRRP replaced these two districts in early 2018. The replacements, Faizabad and Khanaqa, were confirmed by local government agencies to be relatively secure.*

[37] CDRRP PIR 2019; section G: Ratings and overall assessment.

For outcome 2, the community-based early warning system (EWS) establishment, the project experienced obstacles in identifying feasible EWS models for floods. As explained under indicator 2.1, different government agencies disagreed on which models to pursue. Moreover, through field visits, the project also discovered the popular community-based model used by INGOs for flood warnings in Afghanistan had poor performance and low community buy-in because the equipment broke down only one year after installation, the warnings did not come early enough to make a difference and there're no reliable maintenance arrangements.

With no feasible and sustainable models for generating warning messages using locally gathered data, the project decided to focus on identifying sources of reliable warning messages issued by partner government or UN agencies and establish sustainable communication channels to pass this information to target communities. The project is also working to involve the agricultural extension network in message delivery to increase the sustainability of the system and the sense of ownership felt by MAIL, which is the implementing agency.

[38] CBARD APR 2020 (draft). Section VII. Lessons learned.

Encouraging inter-cropping: Intercropping has proved to be particularly beneficial for pest control and increasing yield so that CDRRP is now including seeds of more than one crop in its trellising packages to encourage intercropping.

Flood wall designs: Project engineers have found boulder walls to be effective for floods on the Kabul and Kunar rivers, especially with trees planted at the back of the walls to reduce water seepage.

Adaptive management has been able to cope with most of the problems that the project has faced, though not with all (for example, the long delay in Component 4 whilst the project was without a Climate Change Specialist for 12 months).

Reporting lines and transparency

There has been considerable sharing of staff between related projects, including:

- CDRRP did not initially have its own livelihoods or infrastructure staff at national level, and until mid-2019 relied on staff from the CCAP project, plus input from its province engineers and livelihoods officers. This lack of central capacity resulted in delays to Component 3, which CDRRP eventually addressed by placing their agriculture-trained Gender Officer in charge of livelihoods and hiring an experienced engineer as Senior Technical Advisor.
- HR, finance, admin, procurement and M&E staff were shared with CBARD and CCAP until late 2019, when CCAP ended and CDRRP recruited some additional staff members. The Administration Officer remains a shared position.

Where staff were initially recruited for one project and then asked to work also for another project, this created mixed reporting lines and a pronounced tendency for staff to prioritise their original project. Whilst this approach saved on staff costs, it also slowed implementation of CDRRP and weakened the capacity of the project to plan, analyse and monitor its interventions.

There was some initial confusion about who should implement the field activities on hazard mapping, early warning systems and Community Development Plans, but those were resolved and responsibilities clarified. Provincial staff are involved in producing each Quarterly Progress Report and discuss regularly with their colleagues in Kabul, so there now seems to be good transparency and effective reporting lines.

UNDP support

UNDP carries out the following roles in support of the project:

- Technical support in project design and when requested by the project team;
- Reporting to the donor and convening the Project Board;
- Evaluation;
- Commissioning independent audits and spot checks;
- Quality assurance, including reviewing project reports, workplans and key Terms of Reference;
- Financial management.

Its support in these areas seems to have been effective and no issues have been identified in any of the documents studied or interviews held.

Communities with poor soil conditions: CDRRP provided greenhouses to farmers in Kuz Metakhil community in Nangarhar despite its poor soil conditions. It replaced poor quality soil with soil from another location mixed with farm yard manure (FYM). Tomato harvests inside these greenhouse have been encouraging.

Technical support

This project has a number of highly technical areas, including climate change, disaster planning and response, early warning systems, agricultural development and engineering-based infrastructure, where managers are unable to take good decisions without strong technical input. From 2017-2019, technical support to the management team in Kabul was very weak, and it still remains to be seen how effectively the project will be able to develop its climate change and early warning activities.

The initial under-supply of technical input delayed project implementation and probably contributed to the project gravitating towards familiar agricultural interventions rather than focussing clearly on its overall objective of building resilience to climate-induced disasters.

3.4.2 Work planning

Start-up and implementation

In the 2019 Project Implementation Review, the UNDP-GEF Technical Advisor assigned ratings of "Moderately Unsatisfactory" for both Development Objective Progress and Implementation Progress, due to very low disbursement. However, the Technical Advisor noted that "*Project start up is always a little slow as many of the procurement activities and civil works take a lot of time to be delivered. The project has done well in advancing these preparatory activities and some impact is starting to show on ground with beneficiaries receiving assistance*."

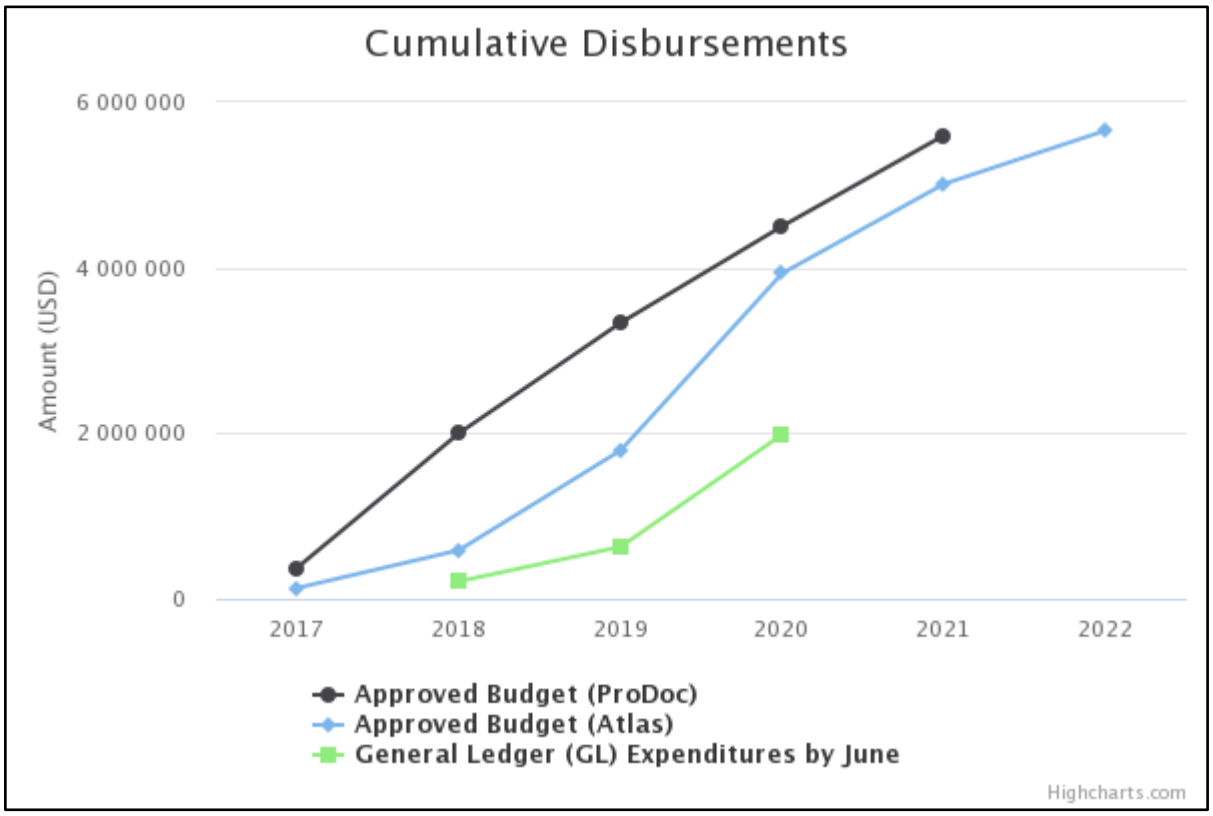
One of the contributing factors was relatively slow recruitment, with several important posts not filled until 2019[39]. There are a number of apparent discrepancies between the organigram on page 36 of the Project Document and the detailed budget on pages 42-47, which contributed to the delays in recruitment[40]. The lack of technical specialists in the early part of the project, both in Kabul and in the provincial offices, contributed to delays in implementation of several components. Note also the issue of "Staff capacity" discussed in section 3.3.2 above.

The 2020 Project Implementation Review showed that, although the ground lost in 2019 had not been made up, disbursement in 2020 was in line with the target for that year, indicating that start-up problems had been resolved:

[39] In 2019, the Senior Technical Specialist and the Early Warning Systems Specialist were appointed, the Hazard Mapping Consultant was hired, and the Gender Specialist was nominated to manage the livelihoods component as the Senior Livelihoods Officer had not (and still has not) been appointed.

[40] The organigram shows the Kabul team as including a Senior Livelihoods Offices, a Senior Engineer and a Gender Specialist, which are not shown in the budget; it also shows two posts for administration and procurement (Admin/HR Officer & Procurement Officer) whilst these are combined into one budget line. On the other hand, the budget includes lines for a National M&E/Knowledge Management Specialist and a National Climate Change Communications Officer, which are not shown in the organigram.

Figure 5: CDRRP cumulative disbursements to end 2020



Source: CDRRP PIR 2020; section D. Implementation progress

The delays to implementation in 2020 due to the Covid pandemic remain an issue that is unlikely to be fully solved until the pandemic is brought under control.

Work planning

Project planning is conducted through Annual Workplans based on the Project. These reports show a strong focus on delivering the activities listed in the Results Framework, i.e. they are results-based.

Use of Results Framework

The main limitations of the Results Framework, as noted in section 3.1.2 above, are that it focuses on activities more than impact and that it lacks ways of measuring the quality of many outputs. With these limitations, the Results Framework is used consistently throughout all reports (Quarterly Progress Reports, Annual Progress Reports and Project Implementation Reviews), which clearly set out the issues hindering progress and the actions proposed to address them.

The following changes to the Results Framework were made in the Inception Report and accepted:

- ***Component 1.1***: Indicators for public awareness activities amended to differentiate between people reached in person and those reached online, with a male/female

indicator only for individuals reached in person. Quantitative targets were adapted to the new indicators whilst remaining essentially the same.

- ***Component 1.3***: The indicator for "risk & vulnerability assessments and hazard mapping" was changed from district level to community level and the target increased accordingly (from 6 to 30).
- ***Component 2.1***: The indicator for coverage by Early Warning Systems was changed from the number of people reached (14,000) to the number of communities covered (30).
- ***Component 2.3***: The indicator for disaster response plans was split into two indicators, one for plans formulated and approved, and one for plans tested through emergency drills. The original target (30) was applied to both indicators.
- ***Component 3.2***: Indicator for livelihoods interventions changed from households to individual beneficiaries, whilst retaining the original target (1,000 with 50 % women and 10 % Kuchi).

All changes seem reasonable and none represented a lowering of aspirations.

No further changes have been made to the Results Framework since the Inception Report, though two amendments are now proposed in section 3.1 above.

3.4.3 Finance and co-finance

Financial management and cost-effectiveness

Economy in procurement

Some indication of economy in procurement can be gained by looking at the four CDRRP livelihoods interventions that were implemented in very similar form in the CBARD projects:

Intervention	CBARD cost	CDRRP cost	Notes
Macro greenhouse	$ 7,900-8,350	$ 7,144	CBARD: Higher cost in Badghis due to security issues
Micro greenhouse	$ 670-1,020	$ 1,441	CBARD: Higher cost in Badghis due to security issues CDRRP: Includes solar panel & pump, which were not included in CBARD
Orchard toolkit	$ 350	$ 350	
Kitchen garden	$ 270	$ 217	CBARD: Cost excludes seeds

Source: CBARD-W Mid-term evaluation; CDRRP project database.

The macro greenhouses and orchard toolkits had very similar costs in both projects, and the different in the cost of micro-greenhouses is explained by the different specifications.

From these limited data, it seems that the prices being paid by the CDRRP project are reasonable.

Cost-effectiveness of different interventions

It is difficult to assess the cost-effectiveness of livelihoods and irrigation interventions without systematic measurement of costs and benefits (see section 3.1.2 and Recommendation 6). However, Annex 5 brings together several different information sources for a *Cost-benefit analysis of project interventions*, and further information can be found in row 10, "Cost-benefit analysis", of each of the individual intervention tables in *Annex 2: Description of interventions*.

Reasonable estimates of costs and benefits could be obtained for five types of intervention:

Table 10: Cost-benefit summary for livelihoods interventions

Intervention	Data source	Av. cost	Av. annual benefit	ROI	Payback period
Dairy toolkit	MTR survey	$ 240	$ 415	173%	7 months
Macro greenhouses	MTR survey	$ 3,231	$ 157	5%	20 yrs 7 months
Macro greenhouses	Annex 5	$ 3,231	$ 500	15%	6 yrs 6 months
Micro greenhouses	Project estimate	$ 1,338	$ 390	29%	3 yrs 5 months
Veg. trellising	MTR survey	$ 1,379	$ 1,200	87%	1 yrs 2 months
Kitchen gardens	MTR survey	$ 223	$ 585	262%	5 months

Source: As noted in the table; additional explanation in Annex 5.

Please note the following:

- ***Av. cost***: Average cost per intervention, from all relevant contracts in the CDRRP project database.
- ***Av. annual benefit***: Average annual benefit, i.e. the increase in annual revenue compared to before the intervention.
- ***ROI***: Undiscounted annual Return on Investment, calculated as *Av. annual benefit* divided by *Av. cost*.
- ***Payback period***: Average time for the cumulative increase in revenue to equal the intervention cost, calculated as *Av. cost* divided by *Av. annual benefit*.

Two different estimates are given of the annual benefit from macro greenhouses: the value of $ 157 calculated from the MTR survey and an overall value of $ 500 from multiple sources reviewed in Annex 5.f. Both estimates show that these greenhouses are considerably less cost-effective than the other livelihoods interventions. This is not new information, as the Mid-Term Evaluation of CBARD-East found that "*Greenhouses are useful in that they bring quick results, but their high cost means that they can only reach a limited number of people.*" Its financial analysis found that macro greenhouses offered the lowest return on investment of the four main livelihoods interventions in that project[41] and recommended prioritising

[41] Two of those interventions (macro greenhouses and micro greenhouses) are included in CDRRP whilst two (conventional orchards and high-density orchards) are not.

conventional orchards in future. A focus on climate resilience rather than opium reduction may favour different interventions than orchards, but the case for allocating 48 % of the livelihoods budget to macro greenhouses has not been made. This specific case is just one example of a key question of project design: *Which interventions will bring the greatest benefits from the limited project funds available?*

A calculation in Annex 5 showed that, for the cost of one macro greenhouse, the project could instead have delivered 4 dairy toolkits, 4 kitchen garden packages and 1 vegetable trellising system. Looking at all the survey respondents with quantifiable livelihoods interventions, reallocating the funds from the 9 macro greenhouses in this way would have increased the number of beneficiaries from 25 to 97, increased the annual benefit from $ 14,000 to $ 59,000 and increased the overall return on investment from 34 % to 146 %. Whilst macro greenhouses may be an easy way to disburse funds and make a visible impact, other interventions would let the project bring more benefit to more people. An approach based on a larger number of lower-cost interventions would also spread project benefits more equitably and reduce the risk of elite capture.

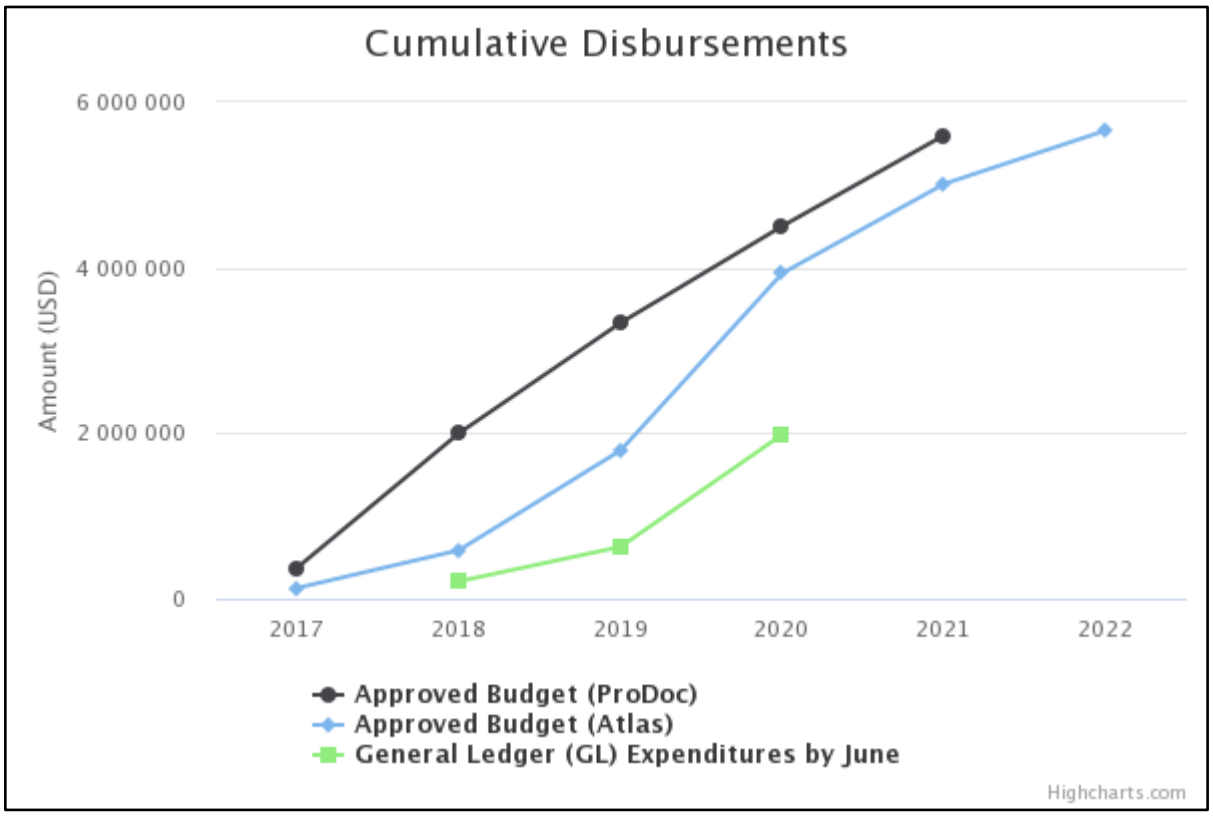
Annex 5.e also mentions to an experience in Farah province where the over-supply of greenhouses by various projects apparently led to a big drop in the market price of greenhouse vegetables. All projects need to take account of such potential effects and ensure that none of their interventions flood the local market.

The findings of this section and the wide variation in data shown in Annex 5 support the earlier Recommendation 6 that *The financial impact of livelihoods interventions should be systematically monitored and priority given to the most cost-effective interventions.* The project might also consider the affordability of interventions and give greater emphasis to low-cost but profitable interventions; this would allow the project to reach more people and would have a stronger demonstration effect, as more ordinary farmers could afford to do the same without project support.

Disbursement over time

Figure 6 below repeats for convenience the figure from section 3.4.2 above:

Figure 6: CDRRP cumulative disbursements to end 2020 (repeated)



Source: CDRRP PIR 2020; section D. Implementation progress

This shows that cumulative disbursement to the end of 2020 was only half the approved budget in the Atlas system and that expenditure during that year was somewhat lower than budgeted. The project will need to further accelerate disbursement in order to meet its budget target by project end in mid-2022.

Budget revisions

The budget has been revised periodically to reflect the difference between actual and planned expenditure, but in each case unused funds have been carried over to the next period for the same component or sub-component, and there have been no changes to fund allocations so far.

The project now has uncommitted funds under Component 2 (Early warning systems) and has committed almost its entire budget under Component 3 (Resilient structures and livelihoods); it is therefore considering requesting a budget reallocation from Component 2 to Component 3, not to exceed 10 % of the total project budget.

The evaluation team has concerns about whether the community-based approach to early warning systems will be successful or sustainable without higher-level support and would like

to be sure that the project has all the funds it needs to develop this component within the remaining life of the project before re-allocating to Component 3.

If funds are moved to Component 3, then a further decision will be needed on allocation between its two sub-components. So far, 84 % of funds under Component 3 have gone on livelihoods interventions. It is clear that these are popular with beneficiaries and are relatively successful (as confirmed by the MTR field survey) but the evaluation team has doubts about how much contribution the livelihoods interventions will really make to reducing the loss of life and livelihoods from climate-induced disasters (see section 3.1.1 above)

It is recommended that the project team should carefully review these issues before any final decision is made on budgetary reallocation. In particular it should:

i) Develop a comprehensive plan for Early Warning Systems, in cooperation with ANDMA and other donors such as the World Bank and EU. If implementation of this plan will require additional financing, this requirement should be met before any reallocation to Component 3.

ii) Double-check that the project has identified all relevant needs for climate-resilient infrastructure across the 30 project communities and that there are no further requirements of flood protection, irrigation structures, emergency shelters, water reservoirs or other relevant infrastructure. Sub-component 3.1 (Climate-resilient structures) should take first priority for any re-allocated funds, with the livelihoods sub-component easily able to absorb any left over.

Recommendation 12 *The project should carefully assess the resources needed to complete the Early Warning Systems component, after the review proposed by Recommendation 3 and re-allocate any remaining funds to Component 3, where priority should be given to infrastructure before livelihoods interventions.*

Box 8: Possible areas for further project support to early Warning Systems

The ***review of Early Warning Systems*** proposed in Recommendation 2 is likely to identify several areas where project funds could help develop a more effective and extensive system. Areas will need to be carefully identified, budgeted and discussed with stakeholders but could potentially include activities such as:

- Establishing and equipping Emergency Operation Centres for District and Province Disaster Management Committees.
- Establishing and training Community Disaster Management Committees in other communities near those already in the project, so that the upstream-downstream flood warning arrangements now being developed will benefit more people.
- Developing Disaster Management Plans at District and Province level, building on the experience already gained with Community Disaster Management Plans.
- Providing at least one additional staff member, plus IT equipment, software and training, to both ANDMA and the Flood Department in the Ministry of Energy and Water, so as to build their early warning capacity and establish day-to-day cooperation.
- Working with mobile phone companies &/or app developers to create systems for sending warning messages direct to any interested person or organisation in the areas at risk. The project might also use the established international system of "Twitter Alerts":
    - *Twitter Alerts are Tweets published by select public agencies and emergency organizations during a crisis or emergency that contain up-to-date information relevant to an unfolding event, such as public safety warnings and evacuation instruction*.

      https://help.twitter.com/ta/managing-your-account/how-to-use-twitter-alerts

Financial controls

The project has access to detailed data from the UNDP Atlas system and also to annual ASL ("Annual Spending Limits") reports that show funds approved, committed and allocated by budget line.

Availability of information for budget management has not been identified as a constraint.

Co-financing

UNDP report that all co-financing funds have been spent and closed, as set out in Table 11; the actual amount contributed by UNDP at the time of the mid-term review was $ 461,981:

Table 11: Co-financing monitoring table

Sources of co-financing	Name of co-financer	Type of co-financing	Amount confirmed at CEO endorsement	The actual amount contributed by the mid-term review	Actual % of the expected amount
	ADB		$ 57.0 m	$ 56.6 m	99.3 %
	World Bank		$ 2.5 m	$ 2.5 m	100.0 %
	MAIL		$ 5.0 m	$ 5.0 m	100.0 %
	UNDP		$1.0 m	0.5 m	46.2 %
Total			**$ 65.5 m**	**$ 64.6 m**	**98.6 %**

Source: Data provided by UNDP

3.4.4 Project-level monitoring and evaluation systems

Monitoring and the Results Framework

The biggest monitoring issue for this project is the lack of monitoring tools, and in some cases even the lack of quantitative targets, to measure progress against the project's overall objective. This is addressed above in section 3.1.2 on *Results Framework and Logframe* but it is worth repeating the recommendations here:

- *Recommendation 5: Mechanisms should be established to measure the impact of disasters on project and comparator communities, so as to assess the overall effectiveness of the project.*
- *Recommendation 6: The financial impact of livelihoods interventions should be systematically monitored and priority given to the most cost-effective interventions.*
- *Recommendation 7: UNDP should continue to monitor the impact of long-term interventions beyond the life of the original project and use the findings to inform design of future projects; a cooperative multi-donor approach to monitoring and cost-benefit analysis of common interventions* might be effective.

The remainder of this section focuses on those monitoring systems that are already in place.

Quantifying beneficiaries from infrastructure interventions

The number of beneficiaries from each infrastructure intervention is currently taken as the population of the area that it directly benefits, based on the number of households and an average household size. This give 31,038 direct beneficiaries from the 15 communities where infrastructure projects have been completed so far, or just over 2,000 people per community. The project approach takes account of the fact that different interventions have different coverage, e.g. a flood protection wall benefitting low-lying homes, an irrigation structure benefitting the downstream command area and an emergency shelter having capacity for a certain number of people. This approach seems reasonable and should not lead to a significant over- or under-estimate of the number of beneficiaries.

Monitoring and management database

The project has developed a management and monitoring database in Google Sheets (a web-based spreadsheet programme that allows multiple users to edit one file), which is used by project staff in Kabul, Jalalabad and Sheberghan to record information on interventions, training, beneficiaries, trainees and contracts. It is the primary source of data on infrastructure and livelihoods interventions under Component 3 and on training under all parts of the project, which is then used to update the Results Framework and GEF Tracking Tool, as well as providing much of the quantitative information used in the Mid-Term Review.

The monitoring and evaluation staff have done a good job of structuring and maintaining the data, within the limitations of the tools available (i.e. Google Sheets for shared files and Microsoft Excel for further analysis by one user), the IT skills of the various users and the instability of internet connections to some project sites. Similar systems are used by the two CBARD projects, though using Microsoft Excel and file transfer by e-mail, rather than Google Sheets.

Each of these implementations suffers from a number of weaknesses, including:

- Difficulties in uniquely identifying beneficiaries and trainees, due to mis-typing of data, inconsistent transliteration of Arabic to Latin script, and the fact that some people do not have or know their ID number.
- Inconsistencies in the names of places and interventions (for example, are a "Fruit nursery" and a "Citrus nursery" the same thing or two different interventions?).
- Some confusion in defining what constitutes an "intervention" and a "beneficiary", for example, when one person receives several interventions or one intervention is shared by several people.

As a result, it is not always easy to find out exactly how many interventions have been delivered or how many people have benefitted from them, which are key monitoring indicators. The limitations of the current database also make it difficult to conduct deeper analysis, such as seeing how many people received more than one intervention, checking whether everyone who received a particular intervention also received the appropriate training, or flagging up individual contracts that seem unduly expensive or appear to be performing poorly.

UNDP currently has at least four projects with a very similar information structure (CCAP, CBARD-W, CBARD-E and CDRRP), whose combined budget exceeds $ 60 million. It would be more effective and cost-effective to allocate resources for a professional programmer to develop a robust multi-user database that could be used by all of these projects, providing the different project managers and monitoring staff with up-to-date data that they can further analyse with familiar spreadsheet tools. Annex 6 presents a *Suggested approach to design of a project database* to address this need and thereby improve project monitoring and management.

Recommendation 13 *UNDP should build a common system for management and monitoring of such projects, with robust and user-friendly data-entry forms and a comprehensive set of analytical tools.*

3.4.5 Stakeholder engagement

Partnerships

The project was developed through a consultative process and has continued to foster relationships with partners, reporting on these every quarter. Implementation continues to work closely with Community Development Councils (CDCs).

For component 2 on Early Warning Systems, the project has discussed with various partners but it seems that more work may be required by all stakeholders to develop a common vision and a coordinated approach to turn it into reality (see Recommendation 3: *The project should review its approach to Early Warning Systems, together with ANDMA, AMD, MoEW and other institutions, and seek a more sustainable, comprehensive and effective model.*)

Participation and country-driven processes

As noted in section 3.1.1, the project is fully in line with national priorities expressed in strategic documents. However, in practice, stakeholders at many levels are more focussed on the problems that are already here today than in preparing for disasters that may or may not occur tomorrow. This lack of deep commitment is not a major barrier to implementation during the project itself but may seriously hinder sustainability after the project is closed (see also section 3.5. *Sustainability*).

All constituent organisations regularly send representatives to the Project Board meetings. There has been a turnover of representatives from the Ministry of Women but all other ministries send the same person to each meeting, allowing them to build up knowledge about the project. UNDP reports that participants usually appear to have read the documents circulated beforehand and that there are now fewer questions raised about the reports now that board members are familiar with the project and report structures.

Participation and public awareness

Raising awareness about climate change and associated disaster risks is one of the target outputs of Component 1, so in this case awareness-raising contributes directly to the project objectives.

Training and awareness-raising in project communities has probably played an important role in securing support and participation in Component 1 (Disaster risk reduction measures), Component 2 (Early warning systems) and the updating of Community Development Plans under Component 4. There has so far been very little progress on other aspects of Component 4, so it is too soon so judge the impact of awareness-raising amongst policy makers.

For Component 3, the highly tangible nature of the interventions means that they would almost certainly have been welcomed even without the awareness-raising measures, as they were for the two CBARD projects.

One specific issue of stakeholder involvement was raised in the Progress Report for the second quarter of 2018: "*Some villagers told CDRRP that they had in the past received empty promises from development agencies and are now reluctant to invest much time and energy participating in new aid projects. In response, the project brainstormed solutions to increase*

communities' trust towards the team. For instance, the team discussed the idea of having demonstration plots in or near communities, where farmers can witness the effectiveness of the farming techniques promoted by CDRRP and the project's commitment to work with and strengthen the livelihoods of local people. CDRRP will further explore the feasibility of this idea and other potential solutions, such as exposure visits to other UNDP/MAIL/GEF projects, to boost communities' confidence in the project."

So far the project has not established dedicated demonstration plots but the project and its Lead Farmers have developed a practice of selecting one of the best interventions in the community and using it as a demonstration for other beneficiaries.

3.4.6 Reporting

Adaptive management

Management issues and responses have been well described in the Quarterly Progress Reports, as well as in the Annual Progress Reports and Project Implementation Reviews that are submitted to the Project Board.

GEF reporting and response to PIR issues

In the 2019 Project Implementation Review, the UNDP-GEF Technical Advisor assigned the project a rating of "Moderately Unsatisfactory" in relation to both Development Objective Progress and Implementation Progress. This was due to "very low delivery figures overall" and the fact that "most targets for this year have not been reached" (i.e. 19 % disbursement against target for mid-2019). However, the Advisor expressed confidence that the project had taken the necessary steps to ensure achievement of its targets over the following 12 months.

The 2020 Project Implementation Review showed that disbursement had risen to 44 % by the middle of that year, representing a marked improvement on 2019 but still a substantial shortfall. On this occasion, no ratings were provided by the UNDP-GEF Technical Advisor but the internal assessments were "Satisfactory" for Development Objective Progress and "Moderately Satisfactory" for Implementation Progress. Component 4 was reported as "Off track" and it was noted that most expenditure to date had been on the community infrastructure and livelihoods interventions of Component 3.

The project has clearly taken action to address major issues identified in the Project Implementation Report. It has not as yet managed to fully overcome the range of barriers noted in section 3.3.2 and get implementation and disbursement back on track but the plans now in place should allow for full disbursement by project end.

3.4.7 Communications

Internal project communication with stakeholders

The formal project documents indicate the communication is working well. UNDP report that ANDMA expressed some concerns about not being properly informed or consulted at the beginning of the project, but there are now no complaints. ANDMA did not raise any concerns on this issue when interviewed by the evaluation team.

External project communication

The project's annual online awareness campaigns have deliberately focussed on the wider issues of climate change and associated disaster risks, rather than on the achievements of this particular project. However, the UNDP website has carried a number of success stories from the CDRRP project[42].

The evaluation team could prepare a short section on this. In terms of sustainable development benefits, it would note:

- Some increase in disaster preparedness, including climate-resilient infrastructure installed in 22 communities and one demonstrable result from the early warning system so far. However, the overall impact is not yet quantified and there is a serious question mark over the sustainability of some activities.
- Increased household incomes from livelihoods interventions benefitting almost 1,000 households so far.
- Increased involvement of women in community decision-making and project implementation.

In terms of global environmental benefits, it would note that:

- The project is focussed on climate-change adaptation, rather than mitigation, and has neither sought nor achieved significant global environmental benefits in terms of reduced greenhouse gas emissions.
- The project itself has quite a substantial carbon footprint[43].

3.5 Sustainability

The latest version of the project Risk Log[44] lists five risks and rates their Probability (P) and Impact (I) on an increasing scale of 1-5:

1. Security (P5, I3)
2. Marginalisation of women and vulnerable groups (P2, I2)
3. Poor stakeholder coordination (P2, I2)
4. Extreme weather events (P3, I3)
5. Limited political support (P2, I2)

[42] E.g. https://www.adaptation-undp.org/Afghanistan-reducing-climate-disaster-risk-one-family

[43] The budget allocates $ 330,000 for national travel, $ 22,500 for vehicle fuel and $ 15,000 for international flights, plus a share of $ 20,000 for regional travel and accommodation. In addition to this, there is substantial use of cement in the infrastructure interventions and some in the livelihoods interventions, plus a long-term increase in fertiliser use, starting with fertiliser supplied by the project and continuing into the future if beneficiaries continue the new practices as the project hopes. There are a number of mitigation measures, such as use of local materials and solar panels, but the net impact will clearly be an increase in direct carbon emissions. However, agricultural output will also rise, and so net emissions per unit of food produced may remain largely unchanged.

[44] CDRRP APR 2020 (draft); Annex 5: Risk log.

All these risks are relevant, and the current ratings seem a reasonable assessment of the likelihood of each risk preventing the project from achieving its goals. In the long term, limited political support, which normally translates into limited ongoing finance, is probably the highest risk to project sustainability. In addition, there are financial risks to the sustainability of interventions at the beneficiary and community level, which will mostly become apparent after the project ends.

3.5.1 Financial risks to sustainability

Beneficiary level: Access to inputs in future years

In the field survey, 32 % of respondents said that they faced difficulties buying inputs after the first year. This may include difficulty accessing supplies and difficulty affording them. There is some risk that annual activities such as vegetable gardens and trellising will be discontinued when beneficiaries do not have sufficient cash to buy seeds and fertilisers, and that milk yield will fall when beneficiaries cannot afford to buy feed. The financial viability of milk collection centres cannot yet be assessed but the margins are not high, and some may struggle to buy inputs and pay wages once project support ends.

Beneficiary level: Long-term maintenance

There is also a risk that long-term assets such as greenhouses and drip irrigation systems will not be adequately maintained due to lack of finance. This will apply particularly to items that require periodic replacement, such as greenhouse plastic and irrigation emitters.

In principle, the revenue generated from these activities should be more than sufficient to fund annual inputs and regular maintenance, but where households are struggling to survive, income may be spent on urgent necessities such as food or medicines rather than retained for re-investment in the enterprise.

Community level: Maintenance of infrastructure

All of the community infrastructure supplied under the project will require a certain amount of maintenance. Many communities already have established systems of using community labour for tasks such as annual cleaning and repair of irrigation canals and walls, so this kind of maintenance is likely to continue. More problematic will be maintenance that requires purchase of new materials, where communities may have to seek assistance from government or projects.

Neither the community infrastructure nor the Early Warning Systems and disaster response plans have a significant requirement for consumable items, and there is a high probability that communities will maintain their mosque-based loudspeaker systems.

3.5.2 Socio-economic risks to sustainability

Community commitment

The community-level early warning systems and disaster preparedness measures need to be maintained and updated regularly. There is a risk, perhaps a substantial risk, that many of these communities will let these systems lapse once the project ends and they no longer

receive regular support and encouragement. The best way to mitigate this risk would probably be for ANDMA to take over high-level support to these systems, with a transition period before the end of the project. This leads on to the question of institutional framework and governance:

3.5.3 Institutional framework and governance risks to sustainability

ANDMA

ANDMA has little capacity to operate on the ground outside of Kabul, and for this reason declined to be the main implementing partner for CDRRP[45]. Afghanistan cannot develop and sustain an effective disaster management system without well-functioning institutions at central, regional and local level. The currently limited capacity of ANDMA represents a substantial risk to long-term sustainability of the project's overall outputs.

Other potential partners

Afghanistan faces several practical challenges to maintaining an early warning system and responding quickly and effectively when disasters do occur. These challenges include security risks, unreliable power supplies and telecommunications, and difficulty in accessing remote locations affected by floods, landslides, avalanches or earthquakes.

In many countries the police, military and other emergency services are best equipped to operate in these conditions, with their particular skills and resources such as all-terrain vehicles, backup generators and resilient communication systems; they would therefore normally form part of the country's disaster planning. In Afghanistan, the police and military assist in rescue operations after a disaster but are not currently involved in early warning or wider issues of response and recovery. This might be something for ANDMA to consider in the long term.

Political support

The project Risk Log includes "Limited political support for the project". It appears that disaster preparedness is not one of the top priorities at any level of government, which may be the main underlying cause of the socio-economic, institutional and governance risks noted here.

Extension service

MAIL does not have a strong extension service of its own, but instead relies heavily on projects to provide advice and training to farmers. CDRRP staff have built up considerable knowledge and prepared training materials on a range of subjects, but without a concerted effort, this knowledge is likely to die with the project. Two previous evaluation reports (the mid-term evaluations of CBARD-W and CBARD-E) recommended strategic reform of MAIL's

[45] The MTR team understands that early discussions on the project structure included discussion with ANDMA on whether they would be the implementing partner. There was then a change of leadership in ANDMA and the organisation said that it did not have the capacity on the ground to implement this project. This fact, plus the interest in agriculture-focussed climate-change adaptation and the established working relationship with MAIL, led to the final selection of implementing partner.

extension activities and a new structured approach to training materials and extension resources. This strategic review has not yet happened but MAIL does have extension staff in all districts of Nangarhar and Jawzjan, as well as in the other provinces. The CDRRP project could increase the sustainability of its extension work by delivering training to as many MAIL extension officers as possible over the remaining period of the project.

This training might stress climate change adaptation in agriculture, sharing the project's experience and knowledge in areas such as inter-cropping, drip irrigation and Integrated Pest Management (IPM). Sustainability of knowledge would also be enhanced by ensuring that all training courses are properly written up into training manuals, and that local universities and other institutions are involved in the training process so they can take over the knowledge and resources.

Recommendation 14 *CDRRP staff should train MAIL extension officers from all districts of Nangarhar and Jawzjan, and ideally other provinces as well, to increase the impact and sustainability of its extension work. Training courses should be properly documented and the materials shared with permanent local institutions.*

3.5.4 Environmental risks to sustainability

Environmental risks to infrastructure

The main environmental risk is that the very natural disasters which the project seeks to mitigate will damage project-supplied infrastructure. This in noted in the risk log (P3, I3), where the main mitigating measure is listed as careful assessment and location of infrastructure. Serious floods and earthquakes may test the resilience of project structures, but no failures have been reported so far.

Environmental impact of livelihoods interventions

All forms of agriculture impact the environment in some way but the interventions under this project are unlikely to have large positive or negative impacts. Some of the farming practices, such as trellising and better orchard management, may have positive benefits in terms of soil conservation and possibly also in reduced used of pesticides. Irrigation investments will affect water use, with new diversions tending to increase abstraction, whilst canal lining should decrease conveyance losses and drip irrigation will decrease field losses. All crop-related interventions represent a degree of intensification and so will tend to increase fertiliser use per unit of land, though not necessarily per unit of output.

None of these impacts is likely to threaten the long-term sustainability of the systems or the achievement of project outcomes.

4 Conclusions and recommendations

4.1 Conclusions

The project team have done a good job of implementing this project in the face of serious obstacles, including security challenges throughout the project and the Covid-19 pandemic over the last ten months. Difficulties with recruitment, procurement and staff capacity have caused delays, particularly during project start-up, but the team adapted and managed to meet its disbursement targets in both 2019 and 2020. It has already exceeded most of the end-of-project targets set out in the Results Framework, though with more work still needed on Early Warning Systems and Climate-Aware Policies.

The community and individual interventions in project communities have been delivered well and have generally managed to avoid the kinds of problems that have affected other projects in this area. The MTR survey showed that the interventions are well received in the communities and, as far as can be judged from the limited data available, the livelihoods interventions seem to be making a useful contribution to household incomes. If this were an agricultural livelihoods project, it would be highly rated and the recommendations would simply focus on improving the monitoring of financial impacts and adjusting the intervention mix towards the most cost-effective activities.

However, this is not an agricultural livelihoods project, it is a disaster resilience project with a secondary objective of climate change adaptation. Against this standard, the project as a whole has been considerably less successful:

- Component 1 has successfully completed its planned work on ***disaster risk-reduction measures***, which paved the way for most of the other activities.
- Component 2 is still working to establish ***early warning systems*** that will be effective and sustainable at both national and community levels, and it is too early to say how successful it will be.
- Component 3 has already disbursed $ 1.25 million on ***resilient structures and livelihoods***, but only $ 210,000 of this can be considered to have medium or high relevance to climate-induced disaster resilience, though a larger share may contribute to climate change adaptation.
- Component 4 has so far made little headway on ***climate-aware policies***, with no evidence yet available on the practical impact of new climate elements brought into Community Development Plans.
- The project does not yet have a measurable definition of "*preparedness and resilience … to climate-induced disaster risks*" nor any mechanisms to measure its overall success in reducing loss of lives and livelihoods to disasters.

The project might also be considered as somewhat lacking in ambition: Afghanistan has more than 30,000 rural communities[46] but the project is working in just 30, less than one

[46] The number of "Community Development Councils" (CDCs) is surprisingly hard to pin down. The project found a figure here (link) suggesting MRRD has established 35,000 CDCs in Afghanistan as of 2016. This number seems reasonable when comparing earlier figures (29,705 as of 2013 that is reported by the world bank (link,

thousandth of the total. Its work on national and provincial policies should have a wider impact, as should its work on provincial and district committees working with ANDMA, but the large majority of the project focus is on its selected 0.1 % of the country's rural communities. Clearly, Afghanistan needs an effective system of early warning and disaster response covering all vulnerable communities.

Arguably, the project should focus its resources on assisting ANDMA and others to build such a system at national, community and intermediate levels, using its presence in 30 communities to develop successful approaches to the community end of the chain, which could then be replicated throughout the country and linked to a strong national system. Such an approach would require good coordination with the EU, World Bank and others active in this field, as well as much closer cooperation with ANDMA.

The big question

The long-term impact of this project can be encapsulated in one hypothetical question:

> *If one of the project districts were struck by a serious climate-related disaster a few years after the project ended, would the project communities there suffer significantly less damage than nearby non-project communities affected by the same disaster?*

By the end of this project, both the project team and the final evaluators should be able to answer this question with a confident *Yes!* At this stage, the evaluators cannot express such confidence, though there is still time to re-orient the project for much greater impact.

Unless the project makes changes to either its objective or its activities, there is a real risk that it will achieve the quantitative targets in the Results Framework yet fail to substantially *"improve the preparedness and resilience of selected Afghan communities to climate-induced disaster risks"*. In other words, the project may hit all its targets but miss its goal.

4.2 Recommendations

Recommendations have been developed and highlighted throughout the body of this report and are repeated in the *List of recommendations*.

page 3 in the note section) and 20,000 as of 2007 as reported here (link, page 108). The project could not find any newer figures. There is, however, a contradictory figure of 46,647 (as of 2015), used by a paper here (link).

The project requested an up-to-date list or count of CDCs from the Ministry of Rural Rehabilitation and Development and was informed that there are around 30,000 CDCs in total, of which 12,698 are supported under the Citizens' Charter.

Annexes

Annex 1. **Terms of Reference**

Project	**PIMS 5398:** Adapting Afghan Communities to Climate-Induced Disaster Risks
Assignment	Mid-Term Review of UNDP GEF-LDCF-2 Project
Positions (*provisional*)	International Consultant for Mid Term Evaluation of the project - Adapting Afghan Communities to Climate-Induced Disaster Risks Project
Contract Type	IC (Individual Consultant)
Duration	35 Working Days (21 home based, 2 travel days, 12 working days in Afghanistan (Kabul, Nangarhar and Jawzjan provinces)[47]
Timeframe	01 October 2020 – 31 December 2020

1. INTRODUCTION

This is the Terms of Reference (ToR) for -the Midterm Review (MTR) of the full-sized UNDP-supported GEF-financed project titled Adapting Afghan Communities to Climate-Induced Disaster Risks (PIMS#**5398**) implemented through the Ministry of Agriculture, Irrigation and Livestock (MAIL), which is to be undertaken in *2020*. The project started on September 26, 2017 and is in its *3rd* year of implementation. This ToR sets out the expectations for this MTR. The MTR process must follow the guidance outlined in the document *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*.

file:///C:/Users/mohammad.salim/Downloads/Guidance%20for%20Conducting%20Midterm%20Reviews%20of%20UNDP-Supported%20GEF-Financed%20Projects_Final_June%202014.pdf

2. PROJECT BACKGROUND INFORMATION

Adapting Afghan Communities to Climate-Induced Disaster Risks is a five-year project, which commenced on 26 September 2017 and is set to close on 25 September 2022. It is a joint initiative of the Global Environment Facility (GEF), Ministry of Agriculture, Irrigation and Livestock (MAIL) and the United Nations Development Programme (UNDP). The project is being implemented by the MAIL under National Implementation Modality (NIM) of UNDP.

[47] "The mission to Afghanistan will be required if the COVID-19 situation permits international travel. If international travel is not possible, all meetings and consultation will be conducted remotely."

The relevant stakeholders of the project are: Ministry of Rural Rehabilitation and Development (MRRD), Ministry of Energy and Water (MoEW), Ministry of Women Affairs (MoWAs), Afghanistan National Disaster Management Authority (ANDMA) and Afghanistan Metrological Department (AMD).

The objective of the project, which is also known as Climate-Induced Disaster Risk Reduction Project (CDRRP), is to improve preparedness and resilience of target communities to climate-induced disaster risks in two provinces of Afghanistan - Jawzjan and Nangarhar. The total budget of the project is US$ 6.6 million including US$ 1 million co-financing from UNDP.

The main co-financing partner for this project has been the Ministry of Agriculture, Irrigation and Livestock (MAIL). The total co-financing from MAIL is US$5,000,000. The World Bank Group is co-financing US$2,500,000, Asian Development Bank (ADB) US $57,000,000. In addition, there is a US$ 1,000,000 cash co-finance from UNDP core fund.

To achieve this goal, the project carries out activities under the following four components:

1) Public awareness and hazard mapping
2) Community-based early warning systems (EWS)
3) Climate-resilient livelihoods
4) Institutional capacity development

Afghanistan is especially vulnerable because of its limited health care system and few medical personnel, weak infrastructure, and poor social cohesion after 40 years of war, along with a large influx of refugees returning from Iran and Pakistan. The Ministry of Public Health (MoPH) shows that as of today (July 13, 2020) 34,451 people across all 34 provinces in Afghanistan are now confirmed to have COVID-19. Some 21,216 people have recovered, and 1,010 people have died (56 of whom are healthcare workers). 79,732 people out of a population of 37.6 million have been tested. 10 per cent of the total confirmed COVID-19 cases are among healthcare staff. Due to limited public health resources and testing capacity, as well as the absence of a national death register, confirmed cases of and deaths from COVID-19 are likely to be under reported overall in Afghanistan. Different COVID-19 models show that the peak for the COVID-19 outbreak in Afghanistan is expected between late July and early August, creating grave implications for Afghanistan’s economy and people’s well-being.

The government has adopted strict containment and quarantine measures, including social distance and using mask. Moreover, strict quarantine for those tested positive and closure of public places and public gatherings have been put in place. Schools, universities and all other government organizations were declared to be closed till now. In the meantime, the Ministry of Hajj and Religious affairs had called upon all people to pray at home and do not hold any mourning/ religious ceremonies at mosques.

3. MTR PURPOSE

The MTR will assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document, and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. The MTR will also review the project's strategy and its risks to sustainability.

The MTR will also review the project's strategy, its risks to sustainability and make recommendations on how to improve the project over the remainder of its lifetime.

The mid-term evaluation is expected to serve as a means of validating or filling the gaps in the initial assessment of relevance, effectiveness, efficiency and sustainability obtained from monitoring. The mid-term evaluation provides the opportunity to assess early signs of project success or failure and prompt necessary adjustments. Specifically, the mid-term evaluation is intended to provide the project team with a basis for identifying appropriate actions to:

a. Address particular issues or problems in project design, identify potential project design issues or problems;
b. Address particular issues or problems regarding project implementation;
c. Address particular issues or problems regarding the project management;
d. Assess progress towards the achievement of objectives and targets;
e. Identify and document initial lessons learnt from experience (including lessons that might improve design and implementation of other Livelihoods and Resilience (L&R) Unit projects);
f. Identify additional risks (which are not part of the current risk log, if any) and countermeasures;
g. Make recommendations and aid decision-making regarding specific actions that might be taken to improve the project and reinforce initiatives that demonstrate the potential for success;
h. Find out the impact of the COVID-19 on the project and propose necessary changes in the project document because of COVID-19.

4. MTR APPROACH & METHODOLOGY

The MTR report must provide evidence-based information that is credible, reliable and useful.

The MTR team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP), the Project Document, project reports including annual PIRs, project budget revisions, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based review. The MTR team will review the baseline GEF focal area Core Indicators/Tracking Tools submitted to the GEF at CEO endorsement, and the midterm GEF focal area Core Indicators/Tracking Tools that must be completed before the MTR field mission begins.

The MTR team is expected to follow a collaborative and participatory approach[48] ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), the UNDP Country Office(s), the Nature, Climate and Energy (NCE) Regional Technical Advisor, direct beneficiaries, and other key stakeholders.

Engagement of stakeholders is vital to a successful MTR.[49] Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to: UNDP Afghanistan, UNDP Bangkok Regional Hub, Ministry of Agriculture, Irrigation and Livestock (MAIL), National Environmental Protection Agency (NEPA), Ministry to Rural Rehabilitation and Development (MRRD), Ministry of Energy and Water (MoEW)); executing agencies, senior officials and task team/ component leaders, key experts and all consultants in the subject area who have been hired by the project, Project Board, project stakeholders, academia, local government and CSOs including project beneficiaries (CDCs), etc. Additionally, the MTR team is expected to conduct field missions to Nangarhar and Jowzjan provinces, including the following project sites the targeted provinces (Karma, Kuz Kunar and Bihsud in Nangarhar and Khwaja Duk Koh, Khanaqa and Fazabad in Jowzjan. The project sites are located in East (Nangarhar) and North (Jowzjan).

The final MTR report should describe the full MTR approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

The specific design and methodology for the MTR should emerge from consultations between the MTR team and the above-mentioned parties regarding what is appropriate and feasible for meeting the MTR purpose and objectives and answering the evaluation questions, given limitations of budget, time and data. The MTR team must, however, use gender-responsive methodologies and tools and ensure that gender equality and women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the MTR report.

The final methodological approach including interview schedule, field visits and data to be used in the MTR must be clearly outlined in the Inception Report and be fully discussed and agreed between UNDP, stakeholders and the MTR team.

The final MTR report must describe the full MTR approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

As of 11 March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic as the new coronavirus rapidly spread to all regions of the world. Travel to the

[48] For ideas on innovative and participatory Monitoring and Evaluation strategies and techniques, see UNDP Discussion Paper: Innovations in Monitoring & Evaluating Results, 05 Nov 2013.

[49] For more stakeholder engagement in the M&E process, see the UNDP Handbook on Planning, Monitoring and Evaluating for Development Results, Chapter 3, pg. 93.

country has been restricted since 21 March 2020 and travel in the country is also restricted. If it is not possible to travel to or within the country for the MTR mission then the MTR team should develop a methodology that takes this into account the conduct of the MTR virtually and remotely, including the use of remote interview methods and extended desk reviews, data analysis, surveys and evaluation questionnaires. This should be detailed in the MTR Inception Report and agreed with the Commissioning Unit.

If all or part of the MTR is to be carried out virtually then consideration should be taken for stakeholder availability, ability or willingness to be interviewed remotely. In addition, their accessibility to the internet/computer may be an issue as many government and national counterparts may be working from home. These limitations must be reflected in the final MTR report.

If a data collection/field mission is not possible then remote interviews may be undertaken through telephone or online (skype, zoom etc.). International consultants can work remotely with national evaluator support in the field if it is safe for them to operate and travel. No stakeholders, consultants or UNDP staff should be put in harm's way and safety is the key priority.

A short validation mission may be considered if it is confirmed to be safe for staff, consultants, stakeholders and if such a mission is possible within the MTR schedule. Equally, qualified and independent national consultants can be hired to undertake the MTR and interviews in country as long as it is safe to do so.

5. DETAILED SCOPE OF THE MTR

The MTR team will assess the following four categories of project progress. See the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for extended descriptions.

i. Project Strategy

Project design:

- Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document.
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results. Were lessons from other relevant projects properly incorporated into the project design?
- Review how the project addresses country priorities. Review country ownership. Was the project concept in line with the national sector development priorities and plans of the country (or of participating countries in the case of multi-country projects)?
- Review decision-making processes: were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute

information or other resources to the process, taken into account during project design processes?

- Review the extent to which relevant gender issues were raised in the project design. See *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for further guidelines.
    - Were relevant gender issues (e.g. the impact of the project on gender equality in the programme country, involvement of women's groups, engaging women in project activities) raised in the Project Document?
- If there are major areas of concern, recommend areas for improvement.

Results Framework/Logframe:

- Undertake a critical analysis of the project's log-frame indicators and targets, assess how "SMART" the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound), and suggest specific amendments/revisions to the targets and indicators as necessary.
- Are the project's objectives and outcomes or components clear, practical, and feasible within its time frame?
- Examine if progress so far has led to, or could in the future catalyse, beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis.
- Ensure broader development and gender aspects of the project are being monitored effectively. Develop and recommend SMART 'development' indicators, including sex-disaggregated indicators and indicators that capture development benefits.
- Undertake critical analyses how the project has been delayed because of the COVID-19 and what are the mitigation measurements that the project should take to finish the project on-time with delivering all targets of the project as per agreed Results Framework/Log-frame.

ii. Progress Towards Results

Progress Towards Outcomes Analysis:

- Review the log-frame indicators against progress made towards the end-of-project targets using the Progress Towards Results Matrix and following the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; colour code progress in a "traffic light system" based on the level of progress achieved; assign a rating on progress for each outcome; make recommendations from the areas marked as "Not on target to be achieved" (red).

Table. Progress Towards Results Matrix (Achievement of outcomes against End-of-project Targets)

Project Strategy	Indicator[50]	Baseline Level[51]	Level in 1st PIR (self-reported)	Midterm Target[52]	End-of-project Target	Midterm Level & Assessment[53]	Achievement Rating[54]	Justification for Rating
Objective: The objective of the project is to improve the preparedness and resilience of selected Afghan communities to climate-induced disaster risks	**Indicator 1**: Number of provinces with operational early warning and data information management systems	0		0	2			
	Indicator 2: Number of Provincial Climate Action Plans that explicitly outline measures for integration of climate-induced disaster risk management into provincial development planning	0		0	2			
	Indicator 3: # of direct project beneficiaries (% female)	0		3,000 (50% female)	15,000 (50% female)			

[50] Populate with data from the Logframe and scorecards

[51] Populate with data from the Project Document

[52] If available

[53] Colour code this column only

[54] Use the 6 point Progress Towards Results Rating Scale: HS, S, MS, MU, U, HU

Outcome 1: Decision-making and implementation of gender- sensitive climate-induced disaster risk reduction measures in selected communities enhanced	**Indicator 1.1**: Number of people in total reached by online and offline public awareness activities (out of which, # people reached in person; # women reached in person)	0		7,000	25,000			
	Indicator 1.2: Number of people trained to undertake monitoring, tracking and analysis of weather data and hazard mapping (%female)	0		100	200			
	Indicator 1.3: Number of hazard mapping and vulnerability assessments carried out or updated at the community level	0		15	30			
Outcome 2: Community-based early warning systems established and effectively utilized by all vulnerable groups	Indicator 2.1: Number of communities with access to improved, climate-related early-warning information	0		7	30			
	Indicator 2.2: Number of quarterly tests conducted of bottom-up and top- down communication channels and procedures for early warnings in each community	0		14	60			
	Indicator 2.3: Number of gender-sensitive, community-specific climate-induced DRR operational plans a) formulated and approved by CDCs and b) tested through emergency drills	0		7	(a) 30 (b) 30			

Outcome 3: Climate-resilient livelihoods focusing on vulnerable groups are implemented in selected communities	**Indicator 3.1**: Number of habitats, multi-purpose emergency shelters and small-scale rural infrastructure built/reinforced/incorporating new materials for enhanced climate resilience	0		10	20			
	Indicator 3.2: Number of direct beneficiaries benefiting from the adoption of diversified, climate-resilient livelihood options (out of which, % women, # kuchi)	0		100 (30% women, 5 kuchi households)	1,000 direct beneficiaries (30% women, 50 kuchi)			
Outcome 4: Strengthened institutional capacities to integrate climate risks and opportunities into national and provincial development plans, policies, budgetary allocation and implementation mechanisms	**Indicator 4.1**: Sub-national plans and processes (Provincial Climate Action Plans and Community Development Plans) developed and strengthened to identify, prioritise and integrate adaptation strategies and measures including implementation budgets	0		0	2 (provincial level); 60 (community level)			
	Indicator 4.2: Number of people (staff) trained to identify, prioritise, implement, monitor and evaluate adaptation strategies and measures (% female)	0		40 (20% women)	160 (20% women)			
	Indicator 4.3: Number of lessons learned, and best practices shared through regional processes (e.g. Heart of Asia – Istanbul Processes and other processes)	0		2	4			

Indicator Assessment Key

Green= Achieved	Yellow= On target to be achieved	Red= Not on target to be achieved

In addition to the progress towards outcomes analysis:

- Compare and analyse the GEF Tracking Tool/Core Indicators at the Baseline with the one completed right before the Midterm Review.
- Identify remaining barriers to achieving the project objective in the remainder of the project.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

iii. Project Implementation and Adaptive Management

Management Arrangements:

- Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.
- Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement.
- Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement.
- Do the Executing Agency/Implementing Partner and/or UNDP and other partners have the capacity to deliver benefits to or involve women? If yes, how?
- What is the gender balance of project staff? What steps have been taken to ensure gender balance in project staff?
- What is the gender balance of the Project Board? What steps have been taken to ensure gender balance in the Project Board?

Work Planning:

- Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved.
- Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results?
- Examine the use of the project's results framework/logframe as a management tool and review any changes made to it since project start.

Finance and co-finance:

- Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions.
- Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions.
- Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds?
- Informed by the co-financing monitoring table to be filled out by the Commissioning Unit and project team, provide commentary on co-financing: is co-financing being used

strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?

Sources of Co-financing	Name of Co-financer	Type of Co-financing	Co-financing amount confirmed at CEO Endorsement (US$)	Actual Amount Contributed at stage of Midterm Review (US$)	Actual % of Expected Amount
GEF-Agency	UNDP Afghanistan	Grant	1,000,000		
Recipient Government	MAIL	Grant	5,000,000		
Donor Agency	World Bank	Grant	2,500,000		
Donor Agency	ADB	Grant	57,000,000		
		TOTAL	**65,500,000**		

- Include the separate GEF Co-Financing template (filled out by the Commissioning Unit and project team) which categorizes each co-financing amount as 'investment mobilized' or 'recurrent expenditures'.

Project-level Monitoring and Evaluation Systems:

- Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive?
- Examine the financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?
- Review the extent to which relevant gender issues were incorporated in monitoring systems. See *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for further guidelines.

Stakeholder Engagement:

- Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders?
- Participation and country-driven processes: Do local and national government stakeholders support the objectives of the project? Do they continue to have an active

role in project decision-making that supports efficient and effective project implementation?
- Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?
- How does the project engage women and girls? Is the project likely to have the same positive and/or negative effects on women and men, girls and boys? Identify, if possible, legal, cultural, or religious constraints on women's participation in the project. What can the project do to enhance its gender benefits?

Social and Environmental Standards (Safeguards)

- Validate the risks identified in the project's most current SESP, and those risks' ratings; are any revisions needed?
- Summarize and assess the revisions made since CEO Endorsement/Approval (if any) to:
  - The project's overall safeguards risk categorization.
  - The identified types of risks[55] (in the SESP).
  - The individual risk ratings (in the SESP) .
- Describe and assess progress made in the implementation of the project's social and environmental management measures as outlined in the SESP submitted at CEO Endorsement/Approval (and prepared during implementation, if any), including any revisions to those measures. Such management measures might include Environmental and Social Management Plans (ESMPs) or other management plans, though can also include aspects of a project's design; refer to Question 6 in the SESP template for a summary of the identified management measures.

A given project should be assessed against the version of UNDP's safeguards policy that was in effect at the time of the project's approval.

Reporting:

- Assess how adaptive management changes have been reported by the project management and shared with the Project Board.
- Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?)
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.

Communications & Knowledge Management:

- Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results?

[55] Risks are to be labeled with both the UNDP SES Principles and Standards, and the GEF's "types of risks and potential impacts": Climate Change and Disaster; Disadvantaged or Vulnerable Individuals or Groups; Disability Inclusion; Adverse Gender-Related impact, including Gender-based Violence and Sexual Exploitation; Biodiversity Conservation and the Sustainable Management of Living Natural Resources; Restrictions on Land Use and Involuntary Resettlement; Indigenous Peoples; Cultural Heritage; Resource Efficiency and Pollution Prevention; Labor and Working Conditions; Community Health, Safety and Security.

- Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?)
- For reporting purposes, write one half-page paragraph that summarizes the project's progress towards results in terms of contribution to sustainable development benefits, as well as global environmental benefits.
- List knowledge activities/products developed (based on knowledge management approach approved at CEO Endorsement/Approval).

iv. Sustainability

- Validate whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Register are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why.
- In addition, assess the following risks to sustainability:

Financial risks to sustainability:

- What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)?

Socio-economic risks to sustainability:

- Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long-term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?

Institutional Framework and Governance risks to sustainability:

- Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems/ mechanisms for accountability, transparency, and technical knowledge transfer are in place.

Environmental risks to sustainability:

- Are there any environmental risks that may jeopardize sustenance of project outcomes?

Conclusions & Recommendations

The MTR team will include a section in the MTR report for evidence-based conclusions, in light of the findings.

Additionally, the MTR consultant/team is expected to make recommendations to the Project Team. Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. A recommendation table should be put in the report's executive summary. See the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for guidance on a recommendation table.

The MTR team should make no more than 15 recommendations in total.

Ratings

The MTR team will include its ratings of the project's results and brief descriptions of the associated achievements in a *MTR Ratings & Achievement Summary Table* in the Executive Summary of the MTR report. See Annex E for ratings scales. No rating on Project Strategy and no overall project rating is required.

Table. MTR Ratings & Achievement Summary Table for (Adapting Afghan Communities to Climate-Induced Disaster Risks)

Measure	MTR Rating	Achievement Description
Project Strategy	N/A	
Progress Towards Results	Objective Achievement Rating: (rate 6 pt. scale)	
	Outcome 1 Achievement Rating: (rate 6 pt. scale)	
	Outcome 2 Achievement Rating: (rate 6 pt. scale)	
	Outcome 3 Achievement Rating: (rate 6 pt. scale)	
	Etc.	
Project Implementation & Adaptive Management	(rate 6 pt. scale)	

Sustainability	(rate 4 pt. scale)	

6. TIMEFRAME

The total duration of the MTR will be approximately 35 working days over a time period of 12 weeks and shall not exceed three months from when the consultant(s) are hired. The tentative MTR timeframe is as follows:

ACTIVITY	NUMBER OF WORKING DAYS	COMPLETION DATE
Document review and preparing MTR Inception Report (MTR Inception Report due no later than 2 weeks before the MTR mission)	5 working days	October 15, 2020
MTR mission: stakeholder meetings, interviews, field visits	12 Working days	November 10, 2020
Presentation of initial findings- last day of the MTR mission	1 working day	November 16, 2020
Preparing draft report (due within 3 weeks of the MTR mission)	12 Working days	December 10, 2020
Finalization of MTR report/ Incorporating audit trail from feedback on draft report (due within 1 week of receiving UNDP comments on the draft)	5 working days	December 31, 2020

Options for site visits should be provided in the Inception Report.

7. MIDTERM REVIEW DELIVERABLES

#	Deliverable	Description	Timing	Responsibilities
1	**MTR Inception Report**	MTR team clarifies objectives and methods of Midterm Review	No later than October 15, 2020	MTR team submits to the Commissioning Unit and project management
2	**Presentation**	Initial Findings	End of MTR mission (November 10, 2020)	MTR Team presents to project management and the Commissioning Unit
3	**Draft MTR Report**	Full draft report (using guidelines on content outlined in Annex B) with annexes	Within 3 weeks of the MTR mission	Sent to the Commissioning Unit, reviewed by RTA,

			(December 10, 2020)	Project Coordinating Unit, GEF OFP
4	**Final Report***	Revised report with audit trail detailing how all received comments have (and have not) been addressed in the final MTR report	Within 1 week of receiving UNDP comments on draft (December 31, 2020)	Sent to the Commissioning Unit

*The final MTR report must be in English. If applicable, the Commissioning Unit may choose to arrange for a translation of the report into a language more widely shared by national stakeholders.

8. MTR ARRANGEMENTS

The principal responsibility for managing this MTR resides with the Commissioning Unit. The Commissioning Unit for this project's MTR is the UNDP Afghanistan Country Office.

The Commissioning Unit will contract the consultants and ensure the timely provision of per diems and travel arrangements within the country for the MTR team and will provide an updated stakeholder list with contact details (phone and email). The Project Team will be responsible for liaising with the MTR team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

9. TEAM COMPOSITION

A team of two independent consultants will conduct the MTR - one team leader (with experience and exposure to projects and evaluations in other regions globally) and one team expert, from the country of the project. The team leader (International Consultant) will *be responsible for the overall design and writing of the Mid-term Evaluation Report and may work from home considering the COVID-19 mitigation measurements.* The team expert (National Consultant) will *assess emerging trends with respect to regulatory frameworks, budget allocations, capacity building, work with the Project Team in developing the MTR itinerary and will go to the relevant provinces to collect the required data and will have regular communication with the international consultant and make sure the data collected is correct and align with the GEF requirements.* The consultants cannot have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with project's related activities.

The selection of consultants will be aimed at maximizing the overall "team" qualities in the following areas:

<u>Education</u>

- A Master's degree in Environment, Climate Change, Natural Resources, or other closely related fields

<u>Experience</u>

- Relevant experience with result-based management evaluation methodologies;
- Experience applying SMART indicators and reconstructing or validating baseline scenarios;
- Competence in adaptive management, as applied to Climate Change Adaptation;
- Experience in evaluating projects;
- Experience working in Asian Countries (incl. Afghanistan);
- Experience in relevant technical areas for at least 5 years of experience
- Demonstrated understanding of issues related to gender and Climate Change Adaptation;
- Experience in gender sensitive evaluation and analysis.
- Excellent communication skills;
- Demonstrable analytical skills;
- Project evaluation/review experiences within United Nations system will be considered an asset;
- Experience with implementing evaluations remotely will be considered an asset.

Language

- Fluency in written and spoken English.

10. ETHICS

The MTR team will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This MTR will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The MTR team must safeguard the rights and confidentiality of information providers, interviewees and stakeholders through measures to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The MTR team must also ensure security of collected information before and after the MTR and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information, knowledge and data gathered in the MTR process must also be solely used for the MTR and not for other uses without the express authorization of UNDP and partners.

11. PAYMENT SCHEDULE

- 20% payment upon satisfactory delivery of the final MTR Inception Report and approval by the Commissioning Unit
- 40% payment upon satisfactory delivery of the draft MTR report to the Commissioning Unit
- 40% payment upon satisfactory delivery of the final MTR report and approval by the Commissioning Unit and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail

Criteria for issuing the final payment of 40%[56]:

[56] The Commissioning Unit is obligated to issue payments to the MTR team as soon as the terms under the ToR are fulfilled. If there is an ongoing discussion regarding the quality and completeness of the final deliverables that cannot be resolved between the Commissioning Unit and the MTR team, the Regional M&E Advisor and Vertical Fund Directorate will be consulted. If needed, the Commissioning Unit's senior management, Procurement Services Unit and Legal Support Office will be notified as well so that a decision can be made about whether or not to withhold payment of any amounts that may be due to the evaluator(s), suspend or terminate the contract and/or remove the individual contractor from any applicable rosters.

- The final MTR report includes all requirements outlined in the MTR TOR and is in accordance with the MTR guidance.
- The final MTR report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other MTR reports).
- The Audit Trail includes responses to and justification for each comment listed.

Notes:

- The deliverables may experience delays because of the COVID-19. The evaluation team has to inform the evaluation commission unit (UNDP Country Office) of any delays, adopt mitigation measures and provids justification for no-cost extension.
- In line with the UNDP's financial regulations, when determined by the Commissioning Unit and/or the consultant that a deliverable or service cannot be satisfactorily completed due to the impact of COVID-19 and limitations to the MTR, that deliverable or service will not be paid.
- Due to the current COVID-19 situation and its implications, a partial payment may be considered if the consultant invested time towards the deliverable but was unable to complete to circumstances beyond his/her control.

12. APPLICATION PROCESS[57]

Recommended Presentation of Proposal:

a) **Letter of Confirmation of Interest and Availability** using the template[58] provided by UNDP;
b) **CV** and a **Personal History Form** (P11 form[59]);
c) **Brief description of approach to work/technical proposal** of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment; (max 1 page)
d) **Financial Proposal** that indicates the all-inclusive fixed total contract price and all other travel related costs (such as flight ticket, per diem, etc), supported by a breakdown of costs, as per template attached to the Letter of Confirmation of Interest template. If an applicant is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the applicant must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

Incomplete applications will be excluded from further consideration.

Criteria for Evaluation of Proposal: Only those applications which are responsive and compliant will be evaluated. Offers will be evaluated according to the Combined Scoring

[57] Engagement of the consultants should be done in line with guidelines for hiring consultants in the POPP: https://info.undp.org/global/popp/Pages/default.aspx

[58] https://intranet.undp.org/unit/bom/pso/Support%20documents%20on%20IC%20Guidelines/Template%20for%20Confirmation%20of%20Interest%20and%20Submission%20of%20Financial%20Proposal.docx

[59] http://www.undp.org/content/dam/undp/library/corporate/Careers/P11_Personal_history_form.doc

method – where the educational background and experience on similar assignments will be weighted at 70% and the price proposal will weigh as 30% of the total scoring. The applicant receiving the Highest Combined Score that has also accepted UNDP's General Terms and Conditions will be awarded the contract.

Annex 2. **Description of interventions**

CLIMATE-INDUCED DISASTER RISK REDUCTION PROJECT (CDRRP)
UNDP Afghanistan

Description of livelihoods interventions

Prepared by Tahira Khaliqyar & Dr Steve Goss

January 2021

TABLE OF CONTENTS

Formatting

It is not very important what format is used, as long as it is consistent throughout the document. I have used:

- Font: Calibri 12 pt for body text and table (larger for headings)
- Spacing: 3 pt before, 3 pt after, keep space between paragraphs of the same style
- Language: English (UK)
- Table borders: 1.5 pt, grid
- Table properties: Do not allow rows to break across pages
- Table properties: Use first row as header row
- Table centred on page
- Table second column width set to 16 cm
- Page breaks: Set manually so each table starts on a new page, after the relevant heading(s)

Header row

I wanted to show which provinces each table applies to.

It was not clear to me whether the dates on your documents described when the intervention applied or when the note was updated – please feel free to change this section.

Project implementation time

Needs completing in most cases (or show in the table from Excel).

Missing and duplicates

I didn't see a sheet for Milk Collection Centres.

I think that "fruit nurseries" is a duplication of "citrus nurseries"; please check.

I noted that there is one potential "pistachio orchard" in the database but none yet implemented.

Cost-benefit analysis

I have added this new section and brought in data from the project survey and our MTR survey. Some lines need to be discussed.

Target and actual numbers

It might be easier to maintain if you followed each Word table with a standard format table from Excel or Google Sheets, showing target and actual beneficiaries by year/gender/province.

Photos

When I wrote a description of the CBARD interventions, I added some photos of each. I have seen some quite nice photos in the project reports that you could bring in here.

Monitoring

I suggest adding a row setting out how the project will monitor the financial impact of each intervention. This should say how many beneficiaries will be sampled, how often, and might form part of an overall monitoring or Gross Margins survey for livelihoods interventions.

1 Dairy

1.1 Dairy toolkits (DAIRY-TOOL)

Dairy toolkits: Nangahar 2021-	
1	**Problem:** In Kama district, most people are busy with agricultural and livestock activities, these people are not completely aware of the importance of value chain in dairy. They mostly used their produced milk for the family self-consumption and the remaining 1-2 litres were left useless. People have a wonderful marketing opportunity for dairy products in Kama district as well in Jalalabad city while they didn't have enough marketing skills to send their milk production from village to market. As it is clear that the market has demands for the products with better quality and these people were not taking care of the hygiene and they were lacking tools and knowledge of collecting pure and healthy fresh milk.
2	**Solution:** CDRRP will support the farmers by providing some tools needed for milk collection and keeping it safe, fresh and healthy while delivering it to the local market. As CDRRP already established an MCC for those farmers who want to sell their milk, this is a wonderful concept for the people to find the sense of business especially in woman. They don't need to give the remaining milk after their consumption to the neighbours for free or to keep it for the next day as it will spoil in room temperature. They can also produce sub products like yogurt, cheese and butter and sell it in the village or in the local market. They will be provided with the following: • 1 Stainless Steel Milk Cans 20 Litter • 1 Manual Churner (For Butter Milk). Capacity 20 lit • 20 kg Animal feed (concentrated ingredient) • 1 Steel Milk Bucket 15 Litre • 1 Box of 100 disposable plastic gloves and masks • 1 set of safety kit (*povidon* for disinfection of cow teats, Dettol soap, hand towel, rubber shoes)
3	**History and results:** • Implemented by CDRRP last year • Yes, the project beneficiaries are very happy by receiving the kits because now they are selling their milk production on MCC even one Kg they couldn't do it before the intervention.
4	**Project implementation time:**

Dairy toolkits: Nangahar 2021-	
5	**Is this intervention sustainable? How?** Yes, because most of the people are busy with livestock activities especially female, so this is the only way which can sell their very little amount of milk production and earn money for themselves. Before the female felt ashamed selling one litter milk to the neighbours or the market, so now they can sell their products to the MCC and the MCC is receiving their milk from door point of their homes they do not need to go too far away from homes as they are not allowed. So ultimately this is sustainable.
6	**Target beneficiaries for this intervention:** • Total number (110) • Female beneficiaries (80) • Male beneficiaries (30)
7	**Required land area for this project:** N/A
8	**Consultation with DAIL:** • Yes
9	**Procurement will be done through:** • NCB
10	**Cost-benefit analysis:** Intervention cost: • Year 1 (project: capital & consumables): $ 240 from CDRRP database • Subsequent years (farmer: consumables & maintenance): Annual revenue: • Without intervention: o $ 0 from 2 project survey respondents (under-estimate) o $ 626 from 6 MTR survey respondents • With intervention: o $ 492 from 2 project survey respondents o $ 1,041 from 6 survey respondents • Increase: o $ 415 from MTR survey Cost-benefit: • 5-year BCR: 8.6 • Payback period: 7 months

1.2 Milk collection centres (DAIRY_MCC) – MISSING

2 Food processing

2.1 Food processing equipment (FOOD_PROC)

Food processing: Nangahar & Jawzjan 2020	
1	**Problem:** During the peak season of vegetable production, some amount of the products are not able to be send to the fresh vegetables market due to the quality, colour, shape, over-ripened and on the other hand there is good demand for the processed form of vegetables in the villages as well as in the local and city markets. Women farmers in the villages have energy, time and interest to get into this vegetables process business but they were lacking the technical knowledge to start it.
2	**Solution:** Processing increases the shelf life of fresh foods and vegetables and adds value to the products and increases the price for it. CDRRP came up with the idea of processing centre for female farmers in the village and with the plan to train them how to process vegetables to prevent wastage of vegetable and earning good money in return of their work. This food processing will reduce or even eliminate their production wastages at peak season. As well good source of income for family. They will receive the followings: • 15 drums for storage • 22000 bottles and labels • Buckets and pots • 2 Solar sealing machine • 2 Solar juicer • 1 solar system installed • 1 Heating unit and gas cylinder • 1 set Hygiene kit (Masks, and gloves, tooth brush & paste) • 1 furnished room with shelves They will be trained on producing different type of pickles, jams and other processed products.
3	**History and results:** • No
4	**Project implementation time:** 1/3/2020 to 1/7/2020

Food processing: Nangahar & Jawzjan 2020	
5	**Is this Intervention Sustainable? How?** Yes, once they are trained on this and equipped with knowledge they will continue and will be a good example for other villagers. This is a good source of income for each individual because they need at initial level pushup to run their business.
6	**Target Beneficiaries for this intervention:** • Total Number ( ) • Female beneficiaries ( )
7	**Required land area for this project:** N/A
8	**Consultation with DAIL:** • Yes
9	**Procurement will be done Through:** • NCB

10	**Cost-benefit analysis:**
	Intervention cost:
	• Year 1 (project: capital & consumables): $ 471 from CDRRP database
	• Subsequent years (farmer: consumables & maintenance):
	Annual revenue:
	• Without intervention:
	  ○ $ 0 from 1 project survey respondent
	• With intervention:
	  ○ $ 623 from 1 project survey respondent
	• Increase:
	  ○ $ 623 from project survey
	Cost-benefit:
	• 5-year BCR: Sample too small to be reliable
	• Payback period: Sample too small to be reliable

3 Horticulture

3.1 Greenhouses

3.1.1 Macro greenhouses (GH_301)

Macro greenhouses: Nangahar & Jawzjan 2020	
1	**Problem:** Current income of the vegetable from 301 m^2 land is 5,000 Afghani in one season because at the times when demand is high for the fresh vegetables and the price is higher in the market there's no production. When the supply to market gets to the peak and prices come down now the local farmers offer their products to the market. They don't have the ability to establish structures to cultivate 1 month earlier than other farmers to offer their products with the highest prices in the market.
2	**Solution:** By implementation of greenhouse project, with the increase in the production, the famers will be able to produce off season productions and at that time the prices go up the maximum value (about 8-10 times high) and the income will be increased up 50,000 Afghani in a season. They will be provided with the followings: • 300 sqm structure of greenhouse covered with plastic and net • 2 pocket seeds of tomato and cucumber F1 hybrid • 130 Plug tray • 2 Wooden table • 2 Solar panel • 1 solar water pump • Fungicide and insecticide • 10 kg NPK fertilizer Liquid and solid • 1 Sprayer 20 litre capacity • 1 set Gardening tools; hand trowel, garden fork, garden hoe, gloves, spade, rake They will also receive trainings on cultivation, greenhouse management, soil improvement, drip irrigation in greenhouse and how to manage their income to spend on their children and do savings for themselves.
3	**History and results:** • Implemented by CDRRP last year • Last year we have received per macro greenhouse in 301 sqm a season 50,000 to 70,000 Afghani in tomato crop.
4	**Project implementation time:** 1/6/2020 to 30/8/2020

Macro greenhouses: Nangahar & Jawzjan 2020	
5	**Is this intervention sustainable? How?** This is a wonderful concept for farmer that he get their income 8 to 10 time more as compared to open field so ultimately when the farmer have seen the advantage then it will never leave these activities.
6	**Target beneficiaries for this intervention:** • Total number () • Female beneficiaries ()
7	**Required land area for this project:** 301 m^2 area
8	**Consultation with DAIL:** • Yes
9	**Procurement will be done through:** • CDC

10	**Cost-benefit analysis:**
	Intervention cost:
	• Year 1 (project: capital & consumables):
	  ○ $ 7,144 from CDRRP database
	  ○ $ 7,900-8,350 from CBARD-W for comparison
	• Subsequent years:
	  ○ Seeds & fertiliser annually
	  ○ Replacement plastic (e.g. $ 100) every 4 years
	Annual revenue:
	• Without intervention:
	  ○ 5,000 AFN ($ 65) from section 1
	  ○ $ 203 from 2 project survey respondents
	  ○ No data from MTR survey
	• With intervention (note the wide range of responses):
	  ○ 50-70,000 AFN ($ 650-910) from section 3
	  ○ $ 1,174 from 2 project survey respondents
	  ○ $ 220 from 9 MTR survey respondents
	  ○ Gross Margin of $ 1,400 from cucumbers; $ 1,200 from tomatoes; $ 2,600 from both crops; from CBARD-W agronomists' estimates
	  ○ $ 200-580 ($ 130-390 per crop × 1.5 crops/year) from CBARD-E MTE survey
	• Increase:
	  ○ $ 220 from MTR survey (lowest of the estimates)
	Cost-benefit:
	• 5-year BCR: 2.3
	• Payback period: 21 years

3.1.2 Micro greenhouses (GH_60)

Micro greenhouses: Nangahar & Jawzjan 2021	
1	**Problem:** Female farmers don't have access to the resources specially lands here in villages the have a small portion behind their house on some corner of the yard. They cultivate vegetables and the complaining about less production per area of vegetable crops, as well each year they are buying the vegetables for own consumption while vegetable seedlings from market with high price some time it has shortage. They can't use land very effectively. They don't have good source of income they are completely dependent upon male members of the family.
2	**Solution:** Growing plants in controlled environment especially off season vegetables, hence to construct greenhouse for female enhance economic situation of poor women-headed households in these targeted communities. Furthermore off-season crop are highly expensive and the farmer whose land is less micro greenhouse is a great option to earn more from a small piece of land. This project will result awareness about production in greenhouses in off season, decreasing production cost in a controlled condition and self-employment. They will be provided with the followings: • 15*4 m (60 m^2) structure of greenhouse covered with plastic and net • 2 pocket seeds of tomato and cucumber F1 hybrid • 130 Plug tray • 2 Solar panel • 1 solar water pump • Fungicide and insecticide • NPK fertilizer Liquid and solid • 1 Sprayer 20 litre capacity • 1 set Gardening tools; hand trowel, garden fork, garden hoe, gloves, spade, rake They will also receive trainings on cultivation, greenhouse management, soil improvement, drip irrigation in greenhouse and how to manage their income to spend on their children and do savings for themselves.
3	**History and results:** • Implemented by CDRRP last year • In 2020 we have implemented 12 projects, from one 60 sqm micro greenhouse (tomato crop) area in a season, beneficiaries earned 30,000 AFN equal their 1 year income before the intervention.
4	**Project implementation time:**

Micro greenhouses: Nangahar & Jawzjan 2021	
5	**Is this Intervention sustainable? How?** This is a wonder full concept for farmer that he get there income 8 to 10 time more as compare to open field so ultimately when the farmer have seen the advantage then they will never lose interest.
6	**Target beneficiaries for this intervention:** • Total number ( ) • Female beneficiaries ( )
7	**Required land area for this project:** 15*4 m; 60 m^2 area
8	**Consultation with DAIL:** • Yes
9	**Procurement will be done through:** • NCB

10	**Cost-benefit analysis:**
	Intervention cost:
	• Year 1 (project: capital & consumables):
	  ○ $ 1,441 from CDRRP database
	  ○ $ 670-1,020 from CBARD-W for comparison
	• Subsequent years (farmer: consumables & maintenance):
	Annual revenue:
	• Without intervention:
	  ○ $ 15 from 2 project survey respondents
	• With intervention:
	  ○ 30,000 AFN ($ 390) from section 3
	  ○ $ 519 from 2 project survey respondents
	  ○ Not quantified in MTR survey
	  ○ Gross Margin of $ 300-330 using family labour; $ 250-280 using paid labour; from CBARD-W agronomists' estimates
	• Increase:
	  ○ $ 390 from section 2
	Cost-benefit:
	• 5-year BCR: 1.5
	• Payback period: 3 ½ years

3.2 Orchards

3.2.1 Pistachio orchards (HORT_ORCH_PIST)

There is one mention of this in the database as a potential intervention, but no implemented examples so far.

3.3 Nurseries

3.3.1 Citrus nurseries (HORT_NURS_CITRUS)

Citrus nurseries: Nangahar 2020	
1	**Problem:** Citrus is one of the native plants grown for years in Nangarhar, people are establishing commercial orchards of citrus and each year market supply is not sufficient even during the growing season of citrus then people are requesting to bring root stock of citrus plants from Pakistan for budding of various verities of citrus. Also most of the lands are affected by flood and drought they are not happy with their production of vegetable and cereal crops so it's better to encourage then enter the citrus market.
2	**Solution:** Citrus nurseries will be excellent source of income for the poor farmer's families as there is high demand for the saplings in the market. CDRRP links beneficiaries with nursery growers' associations. They will produce saplings from seed and bud the saplings under the supervision of nursery growers and supply to the market. Current income of the vegetable from 400 m^2 land is 5,000 to 10,000 Afg in a season, by the implementation of Citrus nurseries project it will be increase up to 50,000 to 90,000 AFN per year. They will be provided with the followings : • 2,000 pieces plastic bags • 5 kg Citrus seed rough lemon/sour orange • 1,000 one year old rough lemon/sour orange rootstock ready for budding • 25 kg Urea fertilizer • 25 kg DAP fertilizer • 1 sprayer 20 litre capacity • Budding tools knives and blade • 1 set Gardening tools; hand trowel, garden fork, garden hoe, gloves, spade, rake • 1 wheelbarrow They will also receive trainings on cultivation, nursery management, budding, and post budding care.
3	**History and results:** Implemented by CDRRP last year In 2020 beneficiaries have sold 10,000 sapling citrus saplings with the price of 50 AFN/ plant. Total amount (500,000 AFN) from the 400 sqm area and at the same time they have sown the orange seed 5,000-10,000 these seedling will ready for budding after 4 months from now.
4	**Project implementation time:**

Citrus nurseries: Nangahar 2020	
5	**Is this Intervention sustainable? How?** Yes, this project is sustainable because this is an excellent concept for the farmer which use the small piece of land in a small piece and get more income 5 to 10 time thank using same land for other purposes or other crops.
6	**Target beneficiaries for this intervention:** • Total number (6) • Male beneficiaries (6)
7	**Min required land area for this project:** 400 m^2
8	**Consultation with DAIL:** • Yes
9	**Procurement will be done through:** • NCB

10	**Cost-benefit analysis:**
	Intervention cost:
	• Year 1 (project: capital & consumables):
	  ○ $ 1,529 from CDRRP database
	  ○ Not part of CBARD
	• Subsequent years (farmer: consumables & maintenance):
	Annual revenue:
	• Without intervention:
	  ○ 5-10,000 AFN ($ 65-130) from section 3
	  ○ $ 39 from 1 project survey respondent
	• With intervention:
	  ○ 500,000 AFN ($ 6,500) from section 3 (oranges unclear)
	  ○ 1,964 from 1 project survey respondent
	  ○ Not quantified in MTR survey (plants not yet ready for sale)
	• Increase: $ 6,400 from section 3
	Cost-benefit:
	• 5-year BCR: 21
	• Payback period: 3 months

3.3.2 Fruit nurseries (HORT_NURS_FRUIT) – DUPLICATE?

The project database lists 25 “citrus nurseries” and 12 “fruit nurseries”; are they the same thing?

3.4 Orchard toolkits (HORT_TOOL_ORCH)

Orchard toolkits: Jawzjan 2019	
1	**Problem** Growing fruit trees in orchard (stone fruits and pome fruit) is one of the main livelihoods of people have in Jawzjan but it's done in a very traditional way. People don't know about the advantages of Good agriculture practices particularly about the training and pruning activities. As a result of climate change, they are experiencing more and more diseases and pest attack and lose their crops. They are not aware of green pruning to prevent pest and diseases. They believe pruning and training decreases the yield as you remove the shoot parts as a result of pruning.
2	**Solution:** They need practical trainings to know about the advantages of Good Agriculture Practices, training, pruning, plant nutrition and IPM practices. It requires some tools to show them how to do it and what will be the result. They will be provided with the followings: • 2 Pruning shears • 1 Sprayer 20 litter capacity • 1 Pruning saw • 1 Ladder • 1 set protective suit • 1Wheelbarrow • Harvesting bags and baskets • Waterproof bags
4	**Project implementation time:** 1/7/2019 to 1/12/2019
5	**Is this intervention sustainable? How?** Yes, They will learn about the agriculture practices, control diseases and pests and it will help them get more yield and more income from the same area. Beside our beneficiaries, other villagers will see, learn and will be encouraged to imitate once they see the result.
6	**Target beneficiaries for this intervention:** • Total number (50) • Male beneficiaries (50)
7	**Required land area for this project:** Min 1,000 m^2
8	**Consultation with DAIL:** • Yes
9	**Procurement will be done through:** • NCB

Orchard toolkits: Jawzjan 2019	

10	**Cost-benefit analysis:**
	Intervention cost:
	• Year 1 (project: capital & consumables):
	  ○ $ 350 from CDRRP database
	  ○ $ 350 from CBARD-W for comparison
	• Subsequent years (farmer: consumables & maintenance):
	Annual revenue:
	• Without intervention:
	  ○ $ 84 from 1 project survey respondent
	• With intervention:
	  ○ $ 260 from 1 project survey respondent
	  ○ Not quantified in MTR survey
	• Increase:
	  ○ $ 175 from project survey
	Cost-benefit:
	• 5-year BCR: Sample too small to be reliable
	• Payback period: Sample too small to be reliable

3.5 Drip irrigation (HORT_DRIP_IRRIG)

Drip irrigation: Nangahar 2019	
1	**Problem:** Pachahi Qala and Kuz Malakan is located in the Kuz Kunar district, Pachahi Qala and Kuz Malakan CDC are affecting by drought seasonally but the location of Pachahi Qala where we are going to work for drip irrigation this site is totally looking for rain if there is raining here will be crops like (wheat) otherwise the site will be not considered as agricultural. The Kuz Malakan CDC have lack of water each season in summer season their crops has been affecting every season due to water.
2	**Solution:** Drip irrigation is one of the advanced methods through which crop can use it a proper amount of water that how much it need it for, specially this method have good for those formers those are suffering from the deficiency of water seasonally. The Pachahi Qala CDC for drip site is located 8 metres above the main canal of water; as well the Kuz Malakan CDC effecting seasonally each year by lack of water in the season of summer, By implementation of drip irrigation project it will be have an excellent result so I am strongly proposed this project which has various advantages is listed below. • Yield increases 25% drip irrigation (but this land does not have source of water before this will be 100%). • Here is less diseased (mildew) experienced with drip tape • Easy of harvest, better with drip • Reduce the erosion • Currently the land is considered as agricultural land, it was arid area • Drip irrigation 25% water saves. • Weed management • Fertilizer saving
3	**History and results:** • No
4	**Is this intervention sustainable? How?** Because the system will be a surprise for the farmer because before they were suffering from drought as well the site will considered non-agricultural, like Pachahi Qala, so ultimately they will be keep their project sustainable.
5	**Project implementation time:** **7/8/2019 to 10/9/2019**
6	**Target beneficiaries for this intervention:** • Total number • Male beneficiaries (2)
7	**Required land area for this project:** 1,000 m^2

Drip irrigation: Nangahar 2019	
8	**Consultation with DAIL:** • Yes
9	**Procurement will be done through:** • CDC

10	**Cost-benefit analysis:**
	Intervention cost:
	• Year 1 (project: capital & consumables):
	  ○ $ 4,085 from CDRRP database
	  ○ Not part of CBARD
	• Subsequent years (farmer: consumables & maintenance):
	Annual revenue:
	• Without intervention:
	  ○ $ 0 from 1 project survey respondent
	• With intervention:
	  ○ $ 974 from 1 project survey respondent
	  ○ Not covered by MTR survey
	• Increase:
	  ○ $ 974 from project survey
	Cost-benefit:
	• 5-year BCR: Sample too small to be reliable
	• Payback period: Sample too small to be reliable

3.6 Kitchen garden packages (HORT_KITCH_GARD)

Kitchen garden packages: Jawzjan 2019	
1	**Problem:** In Jawzjan in some of the communities, female farmers are not allowed to work outside the house. Cultivate local varieties of vegetable seeds in their yard or a close plot close to the house, the germination percentage of the local vegetable varieties not more than 40%. The local vegetable seeds are mostly susceptible to different disease. In the other hand the production of the local vegetable is very low compared to hybrid vegetable seeds.
2	**Solution:** To implement the kitchen gardening project the rural women can grow fresh vegetable in their home or their garden. Kitchen garden will ensure that the local communities will eat more vegetables as well as they stay active. The price of vegetables are higher in the market so household wouldn't pay for the vegetables. By this intervention Women in the family can grow vegetable beside daily consumption and can sell it to the villagers. The kitchen gardening will create the job opportunities to rural female. Through kitchen gardening we will bring the food diversification in the life of rural people and also income to women's pocket. They will be provided with the following : • 200 grammes seed of: Eggplant, Tomato, onion, pepper, okra, coriander, lettuce, • 50 kg DAP and Urea, • 200 gram Pesticide • 1 watering can • 1 set Gardening tools; hand trowel, garden fork, garden hoe, gloves, spade, rake They will also receive trainings on cultivation, and how to manage their income to spend on their children and do savings for themselves.
4	**Project implementation time:** 15/02/2019 to 30/5/2019
5	**Is this intervention sustainable? How?** Although it doesn't have any structure but when the farmers receive two times more production than other varieties from the same piece of land. They will be encouraged to buy hybrid and certified seeds from their savings for next year.
6	**Target beneficiaries for this intervention:** • Total number (13) • Female beneficiaries (13)
7	**Required land area for this project:** 200 m^2 area
8	**Consultation with DAIL:** • Yes

Kitchen garden packages: Jawzjan 2019	
9	**Procurement will be done through:** • NCB

10	**Cost-benefit analysis:**
	Intervention cost:
	• Year 1 (project: capital & consumables):
	  ○ $ 33 from CDRRP database
	  ○ $ 267 ($ 190 tools + $ 77 fertiliser; seeds not included) from CBARD-W for comparison
	• Subsequent years (farmer: consumables & maintenance):
	Annual revenue:
	• Without intervention:
	  ○ Not quantified in MTR survey but assumed to be low
	• With intervention:
	  ○ $ 585 from 3 MTR survey respondents
	• Increase:
	  ○ $ 585 from MTR survey
	Cost-benefit:
	• 5-year BCR: 11
	• Payback period: 5 months

3.7 Vegetable trellising (HORT_TRELL)

Vegetable trellising: Nangahar 2021	
1	**Problem:** farmer in all three districts of Nangarhar province Kama, Bihsud and Kuz kunar have already been engaged with vegetable cultivation like tomato, potato, reddish, turnip, cucumber, spongy gourd, bitter gourd crops and cereal crops. The farmers claimed that we have much loss more than 30% during the harvest due to less knowledge pre and post management of vegetable production caused them to sell their products in low prices because of poor quality. The climate in Nangarhar is perfect and allows 3-4 cultivation during the year but the farmers don't know which techniques to adopt to reduce the loss which is happening. They have no idea of good agriculture practices and going with the same traditional farming methods. They invest, work, but at the end the income is very less and demotivates them.
2	**Solution:** The vegetable trellising system helps the production increase per area, from the past experience that we have introduced this method for all climber types of vegetable. This is an excellent initiative for farmers which can lead to get 3 to 4 time more production with good quality as compare to their traditional methods which are practicing for climber types of vegetable. The vertical farming method give more space to grow other crop between rows Beside this the farmers can do intercropping production in the same piece of land at the same time. They will be provided with the followings: • Trellising system wires and Bamboo sticks installed • 200 grams Bitter Gourd seed F1 (hybrid) • 150 grams Spongy gourd seed F1 (hybrid) • 200 grams Tomato Seed F1capten (hybrid) • 50 kg Urea • 25 DAP fertilizer • 2 kg pesticide • 1 Sprayer 20 litres capacity • 1 Wheelbarrow • 1 set Gardening tools; hand trowel, garden fork, garden hoe, gloves, spade, rake They will also receive trainings on cultivation, good agriculture practices, smart agriculture, pre-post-harvest management.
3	**History and results:** • Implemented by CDRRP • Last year we have been installed 100 vegetable trellising system in our targeted district the average production from 1,000 m^2 land was 7,700 kg as well the intercrop was another advantage for farmer. And by traditional method farmer received average production was 1,400 kg per 1,000 m^2 land area.

Vegetable trellising: Nangahar 2021	
4	**Project implementation time:** 1/2/2021- 28/5/2021
5	**Is this intervention sustainable? How?** Yes, this method has been remained sustainable because already the farmers have the concept and practicing this method. They received good results so far.
6	**Target beneficiaries for this intervention:** • Total number (30) • Female beneficiaries (5) • Male beneficiaries (25)
7	**Required land area for this project:** 1,000 m^2 area
8	**Consultation with DAIL:** • Yes
9	**Procurement will be done through:** • CDC

10	**Cost-benefit analysis:**
	Intervention cost:
	• Year 1 (project: capital & consumables):
	  ○ $ 1,379 from CDRRP database
	  ○ Not part of CBARD
	• Subsequent years (farmer: consumables & maintenance):
	Annual revenue:
	• Without intervention:
	  ○ 1,400 kg from section 3 (= 18 % of "with intervention")
	  ○ Not quantified in MTR survey (estimate at $ 1,464 × 18 % = $ 264)
	• With intervention:
	  ○ 7,700 kg from section 3
	  ○ $ 1,464 inc. inter-crops from 7 MTR survey respondents
	• Increase: $ 1,200 from MTR survey
	Cost-benefit:
	• 5-year BCR: 4.4
	• Payback period: 14 months

Annex 3. **Evaluation matrix**

Document analysis and interviews were used for almost every question, and the project database spreadsheets were also widely used. Evaluation questions relating to specific components show the component number in brackets.

Evaluation questions	Indicators	Sources	Methodology
Project strategy, including project design, Results Framework and logframe			
Relevance: To what extent is the project strategy relevant to country priorities and country ownership? Is the project in line with national strategies and planning documents? How effectively were stakeholders involved in project design?	• Priorities set out in strategic documents	• UNDAF • UNDP CPD • Afghanistan Strategy for Disaster Risk Reduction • Afghanistan National Disaster Management Plan • National stakeholders, including ANDMA & MAIL • Provincial & district stakeholders, inc. PAIL & DAIL • Local stakeholders, inc. CDCs & community members	• Document analysis • Interviews • Field survey

Evaluation questions	Indicators	Sources	Methodology
Problem analysis: Has the project compiled data on the frequency and severity of the different climate-related disasters and on how these numbers are changing over time? Are they put in context, for example, as once-in-a-lifetime events, once-in-a-decade events and annual events? Does the project, or those who develop the warnings, have a good understanding of the meteorology and hydrology behind floods and landslides, such as the quantity and intensity of rainfall that can trigger landslides, or the rate at which a flood wave travels down a river?	• Time-series data on extreme weather events • Analytical text on the mechanisms of climate-induced disasters in Afghanistan	• Hazard Risk Mappings & Vulnerability Assessments (individual Community reports and Province summary reports) • Project team	• Document analysis, including quantitative analysis of reported disasters • Interviews
Project design: Why were these interventions chosen? To what extent were beneficiary communities' requests influenced by what they had seen of previous projects? Given the structure of rural household incomes, why was so much attention paid to agriculture rather than to other forms of livelihood? Should more attention be given to the role that urbanisation and rural-urban migration can play in improving people's livelihoods and moving them to less disaster-prone areas?	• Written & verbal explanation of project rationale • Income sources & shares in beneficiary communities	• Project Document and progress reports • Project team • MAIL • Questionnaires	• Document analysis • Interviews • Field survey

Evaluation questions	Indicators	Sources	Methodology
Results framework: How "SMART" are the indicators and targets? Are the objectives clear, practical and feasible within the project time frame? How can the project measure progress against its ultimate objectives? More specifically, how can resilience be quantified and measured? Are any of the results indicators of limited practical value and hence not needed? Should any new indicators be added to the monitoring framework?	• Indicators of resilience and/or losses due to disasters	• Project database • Project Document and progress reports • Project team, inc. M&E staff	• Document analysis • Database analysis • Interviews
Awareness raising (1.1): Has the project managed to measure general awareness of climate change and related disaster risks, before and after awareness campaigns? If so, how effective were they?	• Awareness measures before and after campaigns	• Project database • Progress reports • Project team	• Document analysis • Database analysis • Interviews
Training (1.2): How well designed and effective are the training courses? Have good course materials been prepared and used?	• Qualitative assessment of training materials • Pre- & post training test scores •	• Training materials • Training reports • Project team • Questionnaires & focus groups	• Document analysis • Data analysis • Interviews • Field survey

Evaluation questions	Indicators	Sources	Methodology
Risk mapping and vulnerability assessments (1.3): How are the risk ratings of "Low", "Medium" and "High" defined and applied? Has the project team compiled the data from the 30 assessments to give a quantitative picture of the frequency and severity of different damaging events? What kinds of risk-reduction measures have communities put in place after completing their assessments? Has the project managed to obtain objective data on the frequency of different hazards to see if, and how, this is changing over time?	• Written description of risk rating methodology • Project data on hazard frequency • Written & verbal descriptions of risk-reduction measures	• Project reports • Project team	• Document analysis • Interviews

Evaluation questions	Indicators	Sources	Methodology
Early warning systems (2): Why was the community-based model selected, and how will it relate to the large-scale systems of meteorology, hydrology and epidemiology that are needed to give earlier warning of risks? Has adequate attention been given to ensuring that national and international weather forecasts and other warnings are effectively disseminated to the communities? How, and how well, will community-based early warning systems work? Has the chosen approach been systematically documented and compared with possible alternatives? Has the project made a clear distinction between developing warnings and delivering warnings, so that community-based systems focus on what they can do best?	• Written texts on EWS rationale & operation	• Project team • MAIL • ANDMA • Questionnaires &/or group discussions (community level)	• Field survey

Evaluation questions	Indicators	Sources	Methodology
Infrastructure interventions (3.1): By how much do the irrigation investments increase incomes, both in average years and in drought years? Has the project developed the right mechanisms to measure this? What is the Benefit-Cost Ratio? How large are the benefits from flood control structures and community shelters when disasters strike, and how frequently do they bring benefits? Has the project developed the right mechanisms to measure this? Has the project selected the most cost-effective interventions? Did the team give adequate attention to other possible forms of shelter during disasters and to multiple use of buildings? Are there other options that should be taken into consideration, such as strategically located afforestation to stabilise slopes and delay water runoff? Did the project design take account of lessons learned from previous infrastructure projects?	• Area, Price & Yield data (APY) • Gross Margin budgets • Project budget data • Data on disaster losses (economic & human)	• Project spreadsheets • Project team • MAIL • ANDMA • Questionnaires &/or group discussions (community level)	• Document analysis • Economic analysis of costs and benefits, if data available • Interviews • Field survey

Evaluation questions	Indicators	Sources	Methodology
Livelihoods interventions (3.2): By how much do the various livelihoods interventions increase incomes, both in average years and in disaster years? Has the project developed the right mechanisms to measure this? What is the Benefit-Cost Ratio for the different interventions? Should the project team include an economist? Did the project design take account of lessons learned from previous livelihoods projects?	• Area, Price & Yield data (APY) • Gross Margin budgets • Project budget data	• CDRRP project spreadsheets • Spreadsheets from other projects running similar livelihoods interventions • Questionnaires (individual beneficiaries)	• Economic analysis of costs and benefits, if data available • Discussion with project management on the possible need for an economist • Field survey
Extension (support to 3): Are farmers being provided with sufficient support to get the best results from their new greenhouses etc.? Is there an established extension system that will continue after the project ends? Have good extension materials been prepared and used?	• Qualitative assessment of extension materials	• Extension materials • Project extension staff • Questionnaires & focus groups	• Document analysis • Interviews • Field survey

Evaluation questions	Indicators	Sources	Methodology
Climate-aware policies (4): Why has there been relatively little progress so far against the fourth component of the project? How well is the project linked to wider policy and planning processes? What do policy makers and planners think of the project contributions made so far and promised? How realistic is it that the project will have a lasting impact on established processes, such as the three-yearly CDC Development Plans under the Citizens' Charter?	• Provincial Climate Action Plans • Climate-change text in Community Development Plans	• Provincial Climate Action Plans (drafted, adopted) • Community Development Plans (drafted, adopted) • Project team • ANDMA	• Document analysis • Interviews

Evaluation questions	Indicators	Sources	Methodology
Gender and vulnerability: How effectively and comprehensively has gender been incorporated into project design and monitoring? Are targets being met? What are the linkages between gender, disaster vulnerability and the effectiveness of project interventions? Does the inclusion of gender targets help the project to achieve its resilience objectives, or is it effectively a separate objective? Given that many disasters have their impact at household level, by endangering crops and buildings used by the whole household, is the vulnerable group in this case women in general, or female-headed households? In respect of the physical ability of individuals to escape from hazardous situations, has adequate attention been given to other vulnerable groups, such as children, elderly people and those who are ill or have disabilities?	• Gender-disaggregated indicators in the project database, including gender balance of trainees and beneficiaries • Gender balance of project team • Analysis of gender issues in community Hazard Risk Mapping & Vulnerability Assessments	• Hazard Risk Mapping & Vulnerability Assessments • Project team • Other published analyses of gender issues • Questionnaires (female beneficiaries)	• Document analysis • Interviews • Field survey • Use of GEF MTR Gender Checklist

Evaluation questions	Indicators	Sources	Methodology
Progress towards results			
To what extent have the expected outcomes and objectives of the project been achieved thus far? Is the project on track to achieve all of its targets by the end date? If now, what barriers need to be overcome and how might this be done? How can the benefits of successful areas be expanded?	• Multiple indicators, including all targets in the Results Framework	• GEF Tracking Tool • Project database • Project M&E staff • Project management	• Data analysis • Interviews • "Traffic lights" coding in Progress Towards Results Matrix
Project implementation and adaptive management			
Covid 19 and adaptive management: How has Covid affected project implementation? Has the project taken adequate measures to protect its staff, trainees, beneficiaries and other stakeholders? How have other project circumstances changed since inception? Has the project been able to adapt to these changing conditions?	• Changes made to workplan due to Covid • Covid measure implemented • Changes made to workplan because of other changed circumstances	• Project reports • Project team	• Document analysis • Interviews

Evaluation questions	Indicators	Sources	Methodology
Monitoring: Can UNDP take advantage of similarities with other UNDP projects to introduce more consistent, effective and efficient monitoring across its portfolio of related projects? Do project provincial staff have the necessary skills to update the databases? If not, how might this be addressed? Do the various monitoring reports effectively feed back into management decisions?	• Structure of project monitoring system	• Project database • Project M&E staff (central and provincial) • Project management	• Database analysis • Interviews
Human resource management: Has the project been able to recruit and retain good staff? Has recruitment been open, competitive and free of external influence?	• Filled & vacant posts in project organigram • Findings of Spot Check reports	• Project reports • Project organigram • Spot Check reports	• Document analysis • Interviews
Financial management and irregularities: Has the project encountered problems of financial irregularities and under-delivery of contracts? Has contracting been open, competitive and free of external influence? Does the project have adequate mechanisms to detect such problems?	• Risk ratings in Spot Check reports	• Spot Check reports • Project team	• Document analysis • Interviews

Evaluation questions	Indicators	Sources	Methodology
Efficiency: Has the project been implemented effectively and efficiently? Have activities been completed on time? Have procurement issues delayed implementation? What other problems have been encountered and how may they be addressed?	• Time from start of procurement to contract signature • Time from contract signature to completion • Disbursement rate	• Project database • Project reports • Atlas system • Benchmarks for similar processes by other UNDP projects	• Document analysis • Data analysis • Requests for additional financial data if necessary • Interviews
Cost-effectiveness: Has the project obtained good value for money?	• Average costs and cost range for standardised inputs	• Project database • Project reports • Atlas system • Benchmarks for similar inputs in other UNDP projects	• Document analysis • Data analysis
Sustainability			
Sustainability at beneficiary level: Will beneficiary farmers be able to continue profitable production from their greenhouses, beehives etc. after the project? Will they be able to maintain the structures and buy the necessary inputs?	• Beneficiary responses	• Questionnaire	• Field survey

Evaluation questions	Indicators	Sources	Methodology
Sustainability at community level: Will communities continue to implement disaster risk reduction measures when they no longer have project support? Will the Early Warning Systems continue to be maintained and operated after the end of the project? Will communities maintain the project-funded structure after the project? Are some more likely to endure than others? Will the Community Development Plans be implemented?	• CDC plans and budget allocations	• Focus groups • Project team • MAIL/PAIL/DAIL	• Interviews • Field survey
Sustainability at provincial and national level: Will the Provincial Climate Action Plans be implemented? Will the increased policy and planning capacity remain in the institutions and be used? Which project activities will be replicated by others without project support?	• Adopted plans and budget allocations for operations after project completion • Commitments by other projects and donors	• Project team • MAIL • ANDMA • Documents of other projects	• Document analysis • Interviews

Annex 4. **Survey methodology & results**

MID-TERM REVIEW OF THE
CLIMATE-INDUCED DISASTER RISK REDUCTION PROJECT (CDRRP)
for UNDP Afghanistan

QUESTIONNAIRE AND SURVEY DESIGN

Prepared by Sharif Wahdati & Dr Steve Goss

November 2020

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Sheets will be printed out and stapled into two sets:

- Beneficiary set (parts 1, 2, 3, 7) = 4 parts + at least 1 intervention part
- Non-beneficiary set (parts 1, 8) = 2 parts
- The sheets on individual interventions (4-6) will be kept loose and used as needed for each beneficiary. They are mostly on two pages, so it would be best to print them double-sided so that we just have one sheet of paper for each intervention.
- The interviewer should number the questionnaires sequentially, and copy the number onto individual sheets used for a beneficiary.

Black type is the original text of the questionnaire.

Answer boxes have been replaced by the counts of each response; percentages are of the total number of definite answers after excluding "Not applicable" & "Don't know". Numbers in brackets are the actual number of responses, to give an indication of how reliable the percentages may be.

Text in blue italics gives a summary or comments on the results.

Questionnaire number:	

4 Front page & general questions (all respondents)

Province:		Name:	
District:		Father's name:	
Community:		Phone No.	
		ID No.	

Q 1) Respondent is:

1.1) Lead Farmer **26 %** (29)

1.2) Other beneficiary **56 %** (62)

1.3) Non-beneficiary **18 %** (20)

Coverage was according to plan.

Two problems with non-beneficiaries: None in Jawzjan due to telephone interviews only; harder to find women to interview.

The overall breakdown of respondents by place & type is as follows:

Number of questionnaires	Respondent type			
Row Labels	Lead Farmer	Other beneficiary	Non-beneficiary	**Total**
Jawzjan	12	36		**48**
Fayzabad	5	9		**14**
Hayderabad	1	5		**6**
Kokal Dash Watanee	2	3		**5**
Shisha khane Arabia	2	1		**3**
Khanaqa	4	16		**20**
Kalta shakh sufla	2	8		**10**
Khanabad arabia	2	6		**8**
Shisha khane Arabia		2		**2**
Khwaja Du Koh	3	11		**14**
Arab Qurloq		1		**1**
Chobash Turkmania	2	5		**7**
Sultuq Khord Turkmanai		1		**1**
Yati Rogh	1	4		**5**
Nangahar	17	26	20	**63**
Bihsud	6	9	6	**21**
Kariz Kabir	2	4	3	**9**
Pole Saracha	2	3	1	**6**
Samar Khil	2	2	2	**6**
Kama	5	8	9	**22**
Bila yari		2		**2**
Khalisa	2	3	2	**7**
Muslim Abad	2		5	**7**
Zakhil	1	3	2	**6**
Kuz Kunar	6	9	5	**20**
Koz Malikan	2	3		**5**
Malik Kali	1	3	3	**7**
Pachahi Qala	2	3	2	**7**
Qala take	1			**1**
Total	**29**	**62**	**20**	**111**

In Nangahar province, non-beneficiaries were identified and interviewed during visits to project communities. All interviews in Jawzjan were conducted by telephone so it was not possible to include non-beneficiaries.

Q 2) Gender: F/M

F: **33 %** (37)

M: **67 %** (74)

The gender balance of the survey closely reflects that of the project to date, with 36 % of livelihoods interventions delivered to women and 34 % of trainees being female.

Q 3) Age group:

3.1) <30 **39 %** (43)

3.2) 30-60 **59 %** (66)

3.3) > 60 **2 %** (2)

Lead Farmers were mainly young.

Often younger family members were the formal beneficiaries, even if older family members were more involved in day-to-day operations.

The project database does not record beneficiary ages.

Q 4) Highest level of formal education completed

4.1) Secondary School **21 %** (23)

4.2) High School **19 %** (21)

4.3) University Level **16 %** (18)

4.4) Religious School (Madrasa) **7 %** (8)

4.5) No education **37 %** (41)

Lead farmers selected by the project mostly have university level education but the overall education level is low amongst the general public of the communities, as in most parts of the country.

Q 5) Which of the following sources of income does your household receive? Tick the second box only for your major source of income:

5.1) Own agriculture ☐ ☐ **35 %** (39)

5.2) Employment in agriculture for others ☐ ☐

5.3) Non-agricultural employment in the village ☐ ☐

5.4) Non-agricultural employment outside the village ☐ ☐

5.5) Own non-agricultural business ☐ ☐

5.6) Remittances ☐ ☐

5.7) Pension, savings, rent, etc ☐ ☐

5.8) Mixed sources ☐ ☐ **65 %** (72)

5.9) Other_____ ☐ ☐

The majority of respondents worked in their own farms alongside working in agricultural fields of others for wage. Non-agricultural employment was also reported by some respondents, but they added that due to limited employment opportunities nowadays, this option for income is not as good as it used to be. Remittances, non-agricultural businesses or pension weren't reported by significant number of respondents as their source of income.

Q 6) Do you understand what is climate change? (Ask respondents to explain and check the appropriate option)

Yes **91 %** (95)

No **9 %** (9)

Not sure 0

Lead farmers had the most in-depth understanding of climate change and its impacts, followed by project beneficiaries. Non-beneficiaries weren't as clear about the concept of

climate change and its impacts but some of them had a slight idea about the changing weather, more severe weather patterns and increasing flash floods.

Most community members have little exposure to international news. Knowledge about climate change tends to spread from the project via Lead Farmers through personal contacts.

Q 7) How much has the climate changed over the past 20 years?

Significantly changed	**50 %** (55)
Somewhat changed	**41 %** (46)
Not changed at all	**9 %** (10)

Lead farmers tend to say that climate changes have been significant over the past two decades, whereas majority of non-beneficiaries said that climate hasn't changed at all during the past two decades. This could potentially be due to good understanding of climate change by the lead farmers, given their involvement with the CDRRP project and multiple trainings on climate change.

Q 8) Do you believe that climate change can disturb your lives and livelihoods adversely?

Yes	**94 %** (85)
No	**6 %** (5)
Don't know	**0**

A very high percentage (94 %) see climate change as a threat. Particularly floods.

Q 9) How frequent are each of the following events in your community? (Encircle the most appropriate option).

Percentages in red are the most common response in each row.

Event		Level of Frequency (Least > Most)				
9.1)	Heavy Rains	**0 %**	**2 %**	**7 %**	**48 %**	**43 %**
9.2)	Severe Heat	**5 %**	**23 %**	**24 %**	**40 %**	**9 %**
9.3)	Floods	**1 %**	**4 %**	**17 %**	**37 %**	**41 %**
9.4)	Drought	**10 %**	**28 %**	**31 %**	**27 %**	**5 %**
9.5)	Storms	**12 %**	**26 %**	**33 %**	**27 %**	**2 %**

Nangahar

Event	Level of Frequency (Least > Most)				
Heavy Rains	**0 %**	**3 %**	**10 %**	**41 %**	**46 %**
Severe Heat	**5 %**	**24 %**	**24 %**	**41 %**	**6 %**
Floods	**2 %**	**5 %**	**24 %**	**27 %**	**43 %**
Drought	**8 %**	**30 %**	**32 %**	**25 %**	**5 %**

Storms	**8 %**	**27 %**	**35 %**	**29 %**	**2 %**

Jawzjan

Event	Level of Frequency (Least > Most)				
Heavy Rains	**0 %**	**0 %**	**4 %**	**56 %**	**40 %**
Severe Heat	**4 %**	**21 %**	**25 %**	**38 %**	**13 %**
Floods	**0 %**	**2 %**	**8 %**	**50 %**	**40 %**
Drought	**13 %**	**25 %**	**29 %**	**29 %**	**4 %**
Storms	**17 %**	**25 %**	**31 %**	**25 %**	**2 %**

There is a perception amongst respondents that heavy rains, severe heat and floods have become more frequent, with respondents in Nangahar somewhat more likely to say that heavy rains had become much more frequent. The project is being implemented in three neighbouring districts, which are the "greenest" in the province, due to high rainfall (they are also relatively secure and accessible, and so attract a lot of projects).

Droughts and storms are perceived overall as of average frequency. People in Nangahar did not usually mention drought as a problem, and so gave the middle score when asked to choose one. Jawzjan is generally drier but drought was still not seen as a major issue.

Q 10) Are you aware of the Climate-induced Disaster Risk Reduction Project (CDRRP)?

Yes **96 %** (107)

No **4 %** (4)

Only 4 interviewees were unaware of the project: 2 of the 20 non-beneficiaries and (surprisingly) 2 of the 62 beneficiaries.

Q 11) Do you understand the overall purpose of the CDRRP project? (Ask respondents to explain and check the appropriate option)

Fully understand **48 %** (53)

Somewhat understand **43 %** (48)

Not understand at all **9 %** (0)

Responses show the interviewer's judgement of how well the respondent understood the project.

Lead Farmers generally had a good understanding.

"Full understanding" was shown by 79 % of Lead Farmers, 42 % of beneficiaries & 20 % of non-beneficiaries.

Q 12) Do you think the project has enabled communities to mitigate risks from climate-induced hazards such as floods and droughts?

Yes **83 %** (92)

No **17 %** (19)

Even amongst the 4 non-beneficiaries who had no understanding of the project purpose, 2 said that it was helping the community to mitigate risks, so these responses should be treated with caution (i.e. saying what they thought the interviewer wanted to hear).

However, even if people did not know much about the project, where they saw an intervention such as a flood-protection wall, they could see a potential benefit.

5 Community interventions (Lead Farmers & other beneficiaries)

Q 13) Which of the following activities has the CDRRP project done in your community?

Question	Yes	No	Don't Know
13.1) Enhanced public awareness to integrate climate-related information into disaster risk management and planning efforts using media such as signboards, posters, public gatherings, radio and TV broadcasts etc.	**98%** (90)	**2%** (2)	
13.2) Provided trainings to community members on climate change related concepts, such as climate resilient livelihoods and mitigating climate-induced disaster risks.	**98%** (86)	**2%** (2)	
13.3) Established mechanisms to monitor climate hazards to generate accurate and timely early warnings.	**45%** (29)	**55%** (36)	
13.4) Established communication channels for issuing and disseminating early warnings to vulnerable groups.	**57%** (33)	**43%** (25)	
13.5) Built climate-resilient habitats and emergency shelters in your community.	**41%** (23)	**59%** (33)	
13.6) Promoted alternative income-generating activities and value-addition activities to diversify livelihood options.	**94%** (78)	**6%**(5)	
13.7) Revised community development plans to fully integrate gender-appropriate responses to climate risks.	**87%** (47)	**13%** (7)	

The large majority saw that the project had been active in awareness-raising, training, livelihoods and community development plans. Around half or fewer of respondents were aware of project activities in early warning systems, communications channels or resilient infrastructure, reflecting the fact that these activities are so far only partly implemented or apply to some communities only.

5.1 Component 1: Disaster risk reduction measures

Q 14) On which of the following mediums have you received public awareness messages regarding climate-induced disaster risk management and planning?

Question	Yes	No
Signboards	**25%** (28)	**75%** (83)
Mosque announcements	**37%** (41)	**63%** (70)
Public gatherings convened by lead farmers or volunteer groups	**62%** (69)	**38%** (42)
Women shuras and cooperatives	**24%** (27)	**76%** (84)
Radio and TV broadcasts	**32%** (35)	**68%** (76)

Schools and education centres	**3%** (3)	**97%** (108)
Posters	**16%** (18)	**84%** (93)
Social Media	**14%** (16)	**86%** (95)
SMS	**0%** (0)	**100%** (111)
Other _____	**1%** (1)	**99%** (110)

The only awareness-raising activity reaching at least half of respondents was public meetings. Social media, which has been the main channel for annual awareness-raising events, shows relatively little penetration of these communities.

Q 15) How effective do you think the messages were to understand and apply the coping strategies against climate-induced disasters?

- Very effective **44%** (49)
- Effective **41%** (45)
- Somewhat effective **7%** (8)
- Not effective at all **8%** (9)

Given the rather limited reach of awareness-raising activities, it is strange that 85 % of respondents rated them as effective of very effective…

Q 16) Have you received training from the CDRRP project?

16.1) Yes **77%** (86)

16.2) No (skip to Q 24) **23%** (25)

Training had reached 25 % of non-beneficiaries, 65 % of beneficiaries and 100 % of Lead Farmers.

Q 17) Which of the following trainings you have received from the CDRRP project? Also indicate the number of times you have received that training.

Question	Yes	No	Multiple Times
17.1) Climate change	**52%** (58)	**35%**(39)	**13%** (14)
17.2) Disaster risk management	**35%** (38)	**55%** (62)	**10%** (11)
17.3) Greenhouse management	**30%** (33)	**59%** (66)	**11%** (12)
17.4) Trellising	**17%** (19)	**75%** (83)	**8%** (9)
17.5) Intercrops	**20%** (22)	**74%** (82)	**6%** (7)
17.6) Drip irrigation	**20%** (22)	**75%** (84)	**5%** (5)
17.7) Citrus nursery	**14%** (15)	**80%** (89)	**6%** (7)
17.8) Integrated Pest Management (IPM)	**32%**(35)	**60%** (67)	**8%** (9)
17.9) Zero tillage	**21%** (23)	**75%** (83)	**5%** (5)
17.10) Fertilizer use	**29%** (32)	**65%** (72)	**6%** (7)
17.11) First aid	**20%** (22)	**74%** (82)	**6%** (7)
17.12) Gender	**15%** (16)	**80%** (89)	**5%** (6)
17.13) Other 1: _____	**21%** (24)	**76%** (84)	**3%** (3)
17.14) Other 2: _____	**5%**(5)	**95%** (105)	**1%** (1)
17.15) Other 3: _____	**1%** (1)	**98%** (109)	**1%** (1)

Q 18) How effective do you think the trainings were to understand and apply the coping strategies against climate-induced disasters?

- Very effective **52%** (57)

- Effective **18%** (20)
- Somewhat effective **5%** (5)
- Not effective at all **26%** (28)

Again, the ratings of training effectiveness seem disproportionate to the number of people actually receiving training.

Q 19) Were the trainings facilitated and training materials provided in local language?

Yes **100%** (82) No **0%** (0) Not applicable

Earlier discussions indicated that some people had been given climate-change training in a language they did not understand, but none of these people were included in the survey sample.

Q 20) Were women of the community provided equal opportunity to participate in the trainings by CDRRP?

Yes **97%** (64) No **3%** (2) Don't know

Inclusion of women in training seems to have been highly effective.

5.2 Component 2: Early Warning Systems

Q 21) Do your community has an Early Warning System (EWS)?

Yes ☐ **33%** (21) No ☐ **67%** (42) Don't know ☐

If No or Don't know, skip to Q27

Q 22) If yes, who established the current EWS in your community?

- ☐ CDRRP **100%** (21)
- ☐ ANDMA **0%** (0)
- ☐ AMD **0%** (0)
- ☐ Another project (Name: _____) **0%** (0)
- ☐ Don't know

No other organisations or projects had established early warning systems in any of the 21 surveyed communities.

Q 23) If currently there is an EWS in place, when was it established?

Year Mainly 2020 Month Throughout the year, esp. May-June Not applicable ☐

Q 24) If currently there is an EWS in place, how effective do you think it is in developing and disseminating timely information on disasters such as floods and landslides to the people in your community?

- ☐ Very effective **62%** (13)
- ☐ Effective **33%** (7)
- ☐ Somewhat effective **5%** (1)
- ☐ Not effective at all **0%** (0)

The only early warning systems yet in place are the WhatsApp groups, which are generally regarded as effective by participants.

Q 25) How often do you receive weather forecast information?

- ☐ On a daily basis **19%** (4)
- ☐ On a weekly basis **52%** (11)
- ☐ On a monthly basis **29%** (6)
- ☐ On a yearly basis **0%** (0)
- ☐ Don't receive any message **0%** (0)
- ☐ Not sure/ Don't know

Of that third of respondents who were aware of early warning systems, most received weather information at least weekly.

Q 26) If any information on climate-induced disasters such as floods is shared with you by the EWS, how much would you trust the information shared?

- ☐ Fully trust **19%** (4)
- ☐ Trust **62%** (13)
- ☐ Slightly trust **19%** (4)
- ☐ Not trust at all **0%** (0)

There seems to be an adequate level of trust in information provided by the project.

Q 27) Are you aware if your community has an early warning committee of local members?

Yes **79%** (61) No **21%** (16) Don't know

Of those who were aware of an early warning system, most also know that there was a local committee.

Q 28) If yes, do you think this committee is inclusive of all members including women, elderly people and people with disability?

Yes **77%** (41) No **23%** (12) Don't know

Concerns about inclusiveness were expressed by almost a quarter of respondents to this question, with an almost equal mix of men and women.

Q 29) Have your community received any equipment or tools to support the early warning system in your community?

Yes **14% (**5) No **86%** (32) Don't know

It is the MTR team's understanding that no such equipment has yet been distributed.

Q 30) If yes, can you list them?

-

5.3 Component 3.1: Community infrastructure

Q 31) Which of the following infrastructure interventions has your community received? Also indicate the status of the intervention, whether it has been completed or currently under construction.

Question	Yes	No	Completed	Ongoing	Don't Know
31.1) Water reservoir for drinking water	**0%** (0)	**92%(**91)	**7%** (7)	**1%** (1)	
31.2) Multi-purpose emergency shelter	**0%** (0)	**99%** (97)	**1%** (1)	**0%** (0)	
31.3) Flood protection or boulder wall	**2%** (2)	**96%** (94)	**2%** (2)	**0%** (0)	
31.4) Irrigation	**3%** (3)	**95%** (93)	**2%** (2)	**0%** (0)	
31.5) Other 1: _____	**0%** (0)	**100%** (98)	**0%** (0)	**0%** (0)	

Q 32) Do you think the infrastructure has addressed the purpose for which it was constructed?

Yes **94%** (15) No **6%** (1) Not applicable

This and the following question indicate a widespread perception that infrastructure interventions are addressing the right issues.

Q 33) Is this infrastructure in line with the community needs?

Yes **100%** (16) No **0%** (0) Not applicable

Q 34) Has the infrastructure been tested during any incidence of disasters such as floods?

Yes **35%** (6) No **65%** (11) Not applicable

Q 35) If yes to Q35, can you provide the month and year of the incidence, and a brief description of what happened.

Year _____ Month _____

Two of these respondents were from Khema district that was hit by floods in August 2020, for which the project issued a warning.

Q 36) How fairly do you think the costs related to infrastructure construction were spent?

- Highly fair **38%** (6)
- Fair **56%** (9)
- Somewhat fair **6%** (1)
- Not fair at all **0%** (0)
- Not applicable

No significant concern was expressed of unfairness or elite capture of the infrastructure funds.

Q 37) How much do you agree to the statement "infrastructure built benefits all members of the community equally"?

- Strongly agree **81%** (13)
- Agree **19%** (3)
- Somewhat agree **0%** (0)
- Not agree at all **0%** (0)
- Not applicable

The decision-making processes seem to be universally perceived as fair (assuming respondents felt free to answer honestly).

Q 38) What have been the benefits of the intervention? (Capture as much detail as possible, e.g. area of farmland protected from damage, new area brought into production, area giving higher yields due to irrigation, sense of security…)

Questionnaire number:	

6 Individual interventions (Lead Farmers & other beneficiaries)

Ask only for Lead Farmers and Beneficiaries.

Q 39) Which of the following livelihood interventions have you received?

Question (No. Jawzjan+Nangahar)	Yes	No	If yes, Year and Month	Use sheet
39.1) Dairy, toolkit (190+190)	**12%** 13 (3 F)	**88%** (98)	Year _____ Month _____	4.1
39.2) Dairy, Milk Collection Centre (20+1) **JAWZJAN**	**4%** 4 (3 F)	**96%** (107)	Year _____ Month _____	4.2
39.3) Greenhouse, macro (39+38)	**10%** 11 (1 F)	**90%** (100)	Year _____ Month _____	5.1
39.4) Greenhouse, micro (50+10)	**9%** 10 (10 F)	**91%** (101)	Year _____ Month _____	5.2
39.5) Vegetable trellising (0+135) **NANGAHAR**	**6%** 7 (0 F)	**94%** (104)	Year _____ Month _____	6.1
39.6) Orchard toolkit (50+0) **JAWZJAN**	**7%** 8 (3 F)	**93%** (103)	Year _____ Month _____	6.2
39.7) Kitchen garden (13+0) **JAWZJAN**	**3%** 3 (1 F)	**97%** (108)	Year _____ Month _____	6.3
39.8) Nursery (0+135) **NANGAHAR**	**3%** 3 (0 F)	**97%** (108)	Year _____ Month _____	6.4
39.9) Food processing (no Qs)	**0%** 0	**100%** (111)	Year _____ Month _____	-
39.10) Drip irrigation (no Qs)	**1%** 1	**99%** (110)	Year _____ Month _____	-
39.11) Other: _____	**0%** 0	**100%** (111)	Year _____ Month _____	-

The survey covered 60 beneficiaries, 21 of them women, of whom all but one had received their interventions (1 micro-greenhouse was still under construction).

Use whichever of the next eight double sheets apply to this person.

Questionnaire number:	

7 Dairy

13 respondents had received dairy toolkits, including 3 women.

6 received the equipment in late 2019, allowing one year of use so far; the other 7 received the equipment in late 2020, mainly in November just a month or so before the survey.

7.1 Dairy toolkit (dairy toolkit beneficiaries)

Q 40) Which of the following have you received?

40.1)	Stainless steel milk cans 20 litre	**100 %** (13)
40.2)	Steel milk bucket 15 litre	**100 %** (13)
40.3)	Milk measuring scale (Mug 2 litre)	**100 %** (13)
40.4)	Manual churner (for butter milk) 20 litre	**100 %** (13)
40.5)	Steel milk filter	**100 %** (13)
40.6)	Providine 250 ml	**100 %** (13)
40.7)	Mineral liquid (multi vitamins) 1000 ml	**100 %** (13)
40.8)	Medicine 200 ml	**100 %** (13)
40.9)	Deworming 200 ml	**100 %** (13)
40.10)	Food safety kit	**100 %** (13)
40.11)	Disposable gloves and masks	**100 %** (13)
40.12)	Animal feed	**100 %** (13)
40.13)	Lime	**100 %** (13)
40.14)	DCP	**100 %** (13)
40.15)	Small plastic tools	**100 %** (13)

Q 41) Do all items of the dairy tool package of good quality?

Yes **100 %** (13)

No 0

Q 42) Were the inputs appropriate and sufficient for your needs in the first year?

Yes **100 %** (13)

No 0

No problems with the quality or quantity of inputs provided by the project.

Q 43) Did you face any problems buying inputs after the first year?

Yes **33 %** (4)

No 67 % (8)

In each case, the problem faced was one of access to money, not difficulty in finding the needed inputs.

Q 44) Have you faced technical problems in utilizing the dairy tools?

Yes	0
No	**100 %** (13)

Q 45) Please tell us about your cows and milk production:

	Number of cows	**Peak daily milk yield**
Before getting tools	Av. 2.3	Av. 7.5 (3-15) kg/day
After getting tools	Av. 2.5	Av. 10.5 (4-10) kg/day

There was no significant impact on the number of cows kept (one farm +2; one farm+1; one farm -1; 10 farms no change). All farms but one reported an increase in peak milk yield, but this figure was highly variable.

Q 46) What did you sell in the most recent year ***before*** you received the dairy tools:

Product (e.g. milk, cheese)	**Market** (e.g. Neighbours, middleman, MCC)	**Quantity** (over the whole year)	**Price** (Afs/kg) (average over the year)
Milk (12)	Neighbours (10) Middleman (2)		18 Afs/kg
Yogurt (1)	Neighbours		40 Afs/kg

Average annual dairy income was $ 626/farm before the intervention.

Q 47) What did you sell in the most recent year ***after*** you received the dairy tools (i.e. 2020):

Product (e.g. milk, cheese)	**Market** (e.g. Neighbours, middleman, MCC)	**Quantity** (over the whole year)	**Price** (Afs/kg) (average over the year)
Milk (11)	MCC (9) Neighbours (1) Middleman (1)		20 Afs/kg
Yogurt (5)	MCC (3) Neighbours (2)		40 Afs/kg
Condensed Dry Yogurt (1)	MCC (1)		40 Afs

Average annual dairy income was $ 1,041/farm after the intervention, an increase of $ 240/farm (66 %). However, in 7 of these 13 cases, dairy toolkits were received too late in 2020 to process any substantial amount of milk that year, so some of these results are hard to explain.

Farms were from 10 communities in 4 Districts. Farms from all communities reported selling to MCCs after the intervention, whereas none did before. Most of these communities did not receive MCCs under this project, so there must be others out there as well.

Q 48) Have you faced any problems marketing the dairy products?

Yes **10 %** (1)

No **90 %** (9)

Marketing problems were extremely rare, suggesting there may be quite a bit of scope to expand this intervention before the market begins to be saturated.

Q 49) Do you think other people will try to follow your example and buy dairy tools?

Yes **100 %** (12)

No **0 %**

All respondents thought that others would copy their example. With an average cost of $ 240 and an estimated payback period of just 7 months (i.e. one season), this investment may well be in reach of many community members even without support, so the project may have had a real demonstration effect here. It would be good for the project to follow this up and see whether this, or other, interventions really do catch on.

Q 50) Any other comments about the dairy tools?

2 respondents asked for longer project support, 1 wanted more cows, and 3 expressed a need for concentrate or feed supplements.

Questionnaire number:	

7.2 Dairy, Milk Collection Centre (dairy MCC beneficiaries; Jawzjan)

4 respondents had benefited from Milk Collection Centres, 3 of them women.

All MCCs were set up form August-November 2019, allowing one full year of operation so far.

Q 51) Which of the following have you received?

51.1)	Aluminium made milk cans 40 litre	**100 %** (4)
51.2)	Lactometer	**100 %** (4)
51.3)	Test tubes and pipets	**100 %** (4)
51.4)	Water reservoir with one 150 Litre capacity	**100 %** (4)
51.5)	Gas cylinder and heating unit with all accessories	**100 %** (4)
51.6)	Milk cream collector	**100 %** (4)
51.7)	Measuring scale	**100 %** (4)
51.8)	Solar fan and solar stand`	**100 %** (4)
51.9)	Solar system with good quality battery	**100 %** (4)
51.10)	Zarang Motorcycle	**100 %** (4)
51.11)	Metal sign board	**100 %** (4)

Q 52) Do all items of the MCC of good quality?

Yes **100 %** (4)

No **0 %**

Q 53) Were the inputs appropriate and sufficient for your needs in the first year?

Yes **100 %** (4)

No **0 %**

No problems with the quality or quantity of inputs provided by the project.

Q 54) Did you face any problems buying inputs after the first year?

Yes **25 %** (1)

No **75 %** (3)

The one reported problem was again one of money to buy inputs.

Q 55) When did the MCC start operating? (check if the operator was already in business before the project gave support; if he was, then we need to capture Before and After for the following new questions)?

All Aug-Nov 2019.

Q 56) How many farmers supply milk to the MCC?

Av. 22 (2 ×15; 2 × 30)

Q 57) How many people work in the MCC?

10 in the coop; 3, 3 & 5 in the other three MCCs

Q 58) Please tell us about your purchases and sales in 2020:

Product (e.g. milk, cheese)	**Bought or sold?**	**Source or market** (e.g. Neighbours, middleman, MCC)	**Quantity** (over the whole year)	**Price** (Afs/kg) (average over the year)
Milk (4)	Bought	Neighbours (4)	Av. 21,600 kg	18 Afs/kg
Yogurt (1)	Bought	Neighbours (1)	12,000 kg	15 Afs/kg
Milk (3)	Sold	MCC (1) Middleman (2)	Av. 43,300 kg (1 D/K)	

Total value of purchases averaged $ 7,344 per MCC and sales averaged $ 7,048 (though sales data were missing from one MCC).

It is noticeable that none of the MCCs sells to final consumers or even retailers; all sell to middlemen or another MCC.

The MCC mark-up on milk was 2-5 Afs/kg, suggesting a gross annual income of just under $ 1,000.

Long-term financial viability must be in question.

Q 59) Have you faced technical or organisational problems in running the MCC?

Yes **0 %**
No **100 %** (4)

Q 60) Have you faced any problems marketing the products of MCC?

Yes **0 %**
No **100 %** (4)

No technical or marketing problems in any case.

Q 61) Do you think other people will try to follow your example and set up a MCC?

Yes **100 %** (4)
No **0 %**

All respondents thought that others might follow their example, but as this is a relatively costly investment (average of $ 1,140 per MCC) and the long-term financial viability is not yet clear, it will be interesting to see whether this happens.

Responses to the questions on dairy toolkits indicate that there are already several MCCs out there, not established by CDRRP. It is not known whether these were purely private initiatives or were supported by other projects.

Q 62) Any other comments about the MCC?

One said that more MCCs should be established.

Questionnaire number:	

8 Greenhouses

8.1 Macro greenhouses (macro greenhouse beneficiaries)

11 respondents had received or will receive macro greenhouses, including 1 woman.

1 was completed in December 2018, 1 in August 2019, 2 in March 2020, 1 in August 2020, 3 in November 2020 and 2 are not yet complete. This represents around 6 cropping years so far.

It should be noted that in each case, the macro greenhouse was shared by 3 beneficiary families, often related, which caused some difficulties in decision making.

Supplies & inputs

Q 63) Which of the following did you receive?

63.1)	Greenhouse, built	**100 %** (9)
63.2)	Irrigation system, installed	**100 %** (9)
63.3)	Solar panel & water pump	**100 %** (9)
63.4)	Tool package	**100 %** (9)
63.5)	Fertiliser package	**100 %** (9)
63.6)	Seed package	**100 %** (9)
63.7)	Pesticide package	**100 %** (9)

Q 64) Do the greenhouse, irrigation system and tools work properly?

Y **100 %** (9)

. . . . . .

Q 65) Were the inputs appropriate and sufficient for your needs in the first year?

Y **100 %** (9)

No problems with the quality or quantity of inputs provided by the project.

. . . . . .

Q 66) Did you face any problems buying inputs after the first year?

Y **22 %** (2)

In both cases, the problem faced was one of access to money, not difficulty in finding the needed inputs.

. . . . . .

Production

Q 67) Please tell us about what you grew in your greenhouse each season:

Season	**Crop**	**Area**	**Production (kg)**	**Price (Afs/kg)**	**How marketed** (use multiple rows if needed)
Summer	Cucumber (3)	3	Av. 700 kg	25 Afs/kg	City market
	Gourd (1)	10	2,800 kg	12 Afs/kg	City market
Winter	Tomato (4)	5 (3 × 3; 1 × 10)	400 kg (1)	12 Afs/kg (1)	City market

Of the 9 greenhouse beneficiaries, the 3 that were completed before March 2020 reported two crops (summer & winter), the 2 that were completed in March 2020 reported one crop and the 4 that were completed in August-November 2020 reported no crops so far.

Only 1 of the 4 second crops had been harvested & sold by the time of the survey, but assuming that the other 3 performed the same as this, total annual income will have averaged $ 222 for each of the 5 greenhouses that grew crops.

Q 68) Have you faced problems marketing your greenhouse crops?

Y **20 %** (1)

N 80% (4)

This farmer felt that he was not getting a fair price from the middleman to whom he sold his produce.

. . . . . .

Technical issues

Q 69) Have you faced technical problems in growing greenhouse crops?

Y **0 %**

No technical problems reported, suggesting that training and technical support were adequate.

. . . . . .

Q 70) Do you think other people will try to follow your example and build a greenhouse?

Y **100 %** (9)

These are the most expensive of all livelihoods interventions, with an average cost of $ 3,230 and a long payback period, so it is questionable whether they will really be emulated.

. . . . . .

Q 71) Any other comments about the greenhouse?

1 comment: Need more seed

Questionnaire number:	

8.2 Micro-greenhouse (micro-greenhouse beneficiaries; F)

4 micro-greenhouses were built in autumn-winter 2019, 3 in spring 2020, 3 in summer-autumn 2020 and 1 not yet complete.

10 of the 11 interviewed beneficiaries were women.

Supplies & inputs

Q 72) Which of the following did you receive?

72.1) Micro-greenhouse, built **100 %** (10)
72.2) Irrigation system, installed **100 %** (10)
72.3) Solar panel & water pump **100 %** (10)
72.4) Tool package **100 %** (10)
72.5) Fertiliser package **100 %** (10)
72.6) Seed package **100 %** (10)
72.7) Pesticide package **100 %** (10)

Q 73) Do the greenhouse, irrigation system and tools work properly?

Y **100 %** (10)

. . . . . .

No problems with quality or non-delivery of planned items.

Q 74) Were the inputs appropriate and sufficient for your needs in the first year?

Y **78 %** (7)
N **22 %** (2)

One farmer expressed a need for more seeds.

. . . . . .

Q 75) Did you face any problems buying inputs after the first year?

Y **30 %** (3)
N **70 %** (7)

. . . . . .

2 farmers said the supplied inputs were insufficient for the first year; 3 different farmers reported problems buying inputs in subsequent years due to lack of funds, though 2 of these only received their greenhouse in 2020.

Cropping

Q 76) What crops have you grown in your greenhouse, were they for household use or sale, and how successful were they? Y/N

Crop (plus any notes)	**Marketing** (ring response)	**Success**: 0 = Failed, 1 = Poor, 2 = Average, 3 = Good
Tomato (9)	HH 1 / Sale 2 / Mixed 4	Failed 0; Poor 0; Average 5; Good 2
Cucumber (2)	HH 0 / Sale 1 / Mixed 1	Failed 0; Poor 0; Average 2; Good 0
Coriander (2)	HH 0 / Sale 1 / Mixed 1	Failed 0; Poor 0; Average 1; Good 1
Spinach (2)	HH 0 / Sale 1 / Mixed 1	Failed 0; Poor 0; Average 1; Good 1
Onion (1)	HH 0 / Sale 0 / Mixed 1	Failed 0; Poor 0; Average 1; Good 0
	HH / Sale / Mixed	
	HH / Sale / Mixed	
	HH / Sale / Mixed	

Assuming no more than two crops can be grown in one year, the 10 completed greenhouses grew 16 crops from a theoretical maximum of 17, showing widespread double-cropping or mixed cropping (which of these it was cannot be distinguished from the questionnaires).

9 crops were partly sold and partly used by the household, 5 were entirely sold and 1 was only used by the household.

10 crops were scored as "Average", 4 as "Good" and none as "Poor" or "Failed".

Technical issues

Q 77) Have you faced technical problems in growing greenhouse crops?

Y **11 %** (1)

N **89 %** (8)

One farmer expressed a general lack of technical knowledge, including on when to apply fertiliser.

. . . . . .

Reactions

Q 78) How have other people reacted to you, as a woman, starting to manage a greenhouse?

3 reported an initial negative reaction that later turned positive; 3 reported positive reactions from the outset.

. . . . . .

. . . . . .

General

Q 79) What benefits have you got from your greenhouse? (e.g. additional income, expenditure saving, better food for the family)

8 reported additional income (not quantified); 2 reported new agricultural practices.

Q 80) Do you think other women will try to follow your example and set up a micro-greenhouse?

Y **91 %** (10)

N **9 %** (1) – the one whose greenhouse is not yet complete

. . . . . .

Q 81) Any other comments about the greenhouse? Y/N

1 reported a need for more seeds; 1 a need for more fertilisers.

. . . . . .

Questionnaire number:	

9 Horticulture

9.1 Vegetable trellising (vegetable trellising beneficiaries; Nangahar; M)

3 of the trellising packages were delivered in spring 2019, 1 in winter 2019, 1 in spring 2020 and 2 in autumn 2020.

All 7 of the interviewed beneficiaries were men.

Supplies & inputs

Q 82) Which of the following have you received?

82.1)	Trellising system, installed	**100 %** (7)
82.2)	Irrigation system, installed	**100 %** (7)
82.3)	Seeds (gourd and tomato)	**100 %** (7)
82.4)	Fertilizers	**100 %** (7)
82.5)	Sprayer 20 litre capacity	**100 %** (7)
82.6)	Metal Sign Board	**100 %** (7)

Q 83) Do the trellising system and tools work properly?

Yes **100 %** (7)

No 0

No problems with the quality of inputs provided by the project.

Q 84) Were the inputs appropriate and sufficient for your needs in the first year?

Yes **71 %** (5)

No **29 %** (2)

Q 85) Did you face any problems buying inputs after the first year?

Yes **71 %** (5)

No **29 %** (2)

In each case, the problem faced was one of access to money, not difficulty in finding the needed inputs.

Cropping

Q 86) Please tell us about what you grew through trellising so far?

Season	**Crop**	**Area**	**Production (kg)**	**Price (Afs/kg)**	**How marketed** (use multiple rows if needed)
Spring	Gourd (3)	10 Biswa (1,270 m^2)			

Summer	Gourd (6)	10 Biswa (1,270 m^2)			
	Tomato (2)	10 Biswa (1,270 m^2)			
	Cucumber (1)	10 Biswa (1,270 m^2)			
Autumn	Gourd (1)	10 Biswa (1,270 m^2)			
	Tomato (1)	10 Biswa (1,270 m^2)			
	Eggplant (1)	10 Biswa (1,270 m^2)			

These beneficiaries have had the trellising systems for a total of about 8 cropping years; over this time they have grown 15 crops (almost two per year), planting the standard area of 10 Biswa (1270 m^2) each time.

Two-thirds (10) of the crops were gourds, with 3 crops of tomatoes, 1 of cucumbers and 1 of eggplant.

Average production was 3,400 kg per crop.

10 crops were sold at city markets, 4 at district markets and 1 at the village market, with no obvious pattern of which crops were sold at which kind of market.

Average income was $ 643 per crop, giving $ 1,206 per cropping year due to near-universal double cropping.

Q 87) Have you grown intercrops in the trellising fields?

Yes **71 %** (5)
No **29 %** (2)

Q 88) If yes to Q83, please tell us about what you grew as intercrops each season:

Season	**Crop**	**Area**	**Production (kg)**	**Price (Afs/kg)**	**How marketed** (use multiple rows if needed)
Spring	Tomato (1)	3 Biswa			
Summer	Beans (2)	3 Biswa			Household consumption (2)
	Tomato (2)	3 Biswa			City market (2), District market (1)
	Onion (1)	3 Biswa			City market (1)
	Okra (1)	5 Biswa			District market (1)

The 5 intercropping farmers together grew 7 crops, with no more than 1 intercrop per year.

Average revenue per intercrop was $ 294.

Adding together the trellised crops and the intercrops shows an average income of $ 1,464 per beneficiary per year.

Q 89) Have you faced problems marketing your produce from the trellising system?

Yes **71 %** (5)
No **29 %** (2)

Marketing seems to be a widespread problem. Given that vegetable trellising seems otherwise to be a highly successful and cost-effective intervention, the project might wish to look into this.

Q 90) Have you faced technical problems in growing crops through the trellising system?

Yes **29 %** (2)
No **71 %** (5)

The 2 farmers with technical problems did not elaborate and it is too small a sample to draw firm conclusions, but there may be a need for some additional training and support.

Q 91) On average, how many crops do you get from your trellising fields? 1.7 (6)

4 farmers said 2 crops, 2 said 1 crop, 1 did not answer.

Q 92) If only one crop, why?

One response: Was first experience of trellising, will grow two crops in future.

Q 93) Do you think other people will try to follow your example and set up a trellising system?

Yes **100 %** (7)

No 0

This is a medium-cost intervention (averaging $ 1,380) but with a payback period of just over one year, so it might be emulated if farmers can find the capital. They may also come up with home-made solutions at considerably lower cost.

Q 94) Any other comments about the trellising system?

No comments.

Questionnaire number:	

9.2 Horticulture toolkits (Horticulture toolkit beneficiaries: Jawzjan; M)

8 respondents received horticulture toolkits, of which 3 were women.

2 received the tools in winter 2019; the other 6 received them in October-November 2020 and so have had little chance to use them.

Supplies & inputs

Q 95) Which of the following did you receive?

95.1)	Pruning shear and saw	**100 %** (8)
95.2)	Spray pump	**100 %** (8)
95.3)	Water proof bags	**100 %** (8)
95.4)	Pesticides	**100 %** (8)
95.5)	Shovel wheel barrow	**100 %** (8)
95.6)	Other tools (basket, ladder)	**100 %** (8)

Q 96) Were the tools of good quality?

Y **100 %** (8)

N 0

No problems with the quality of inputs provided by the project.

. . . . . .

Q 97) Were the pesticides and bags appropriate and sufficient for your needs in the first year?

Y **88 %** (7)

N **13 %** (1)

It was not recorded which inputs were found to be insufficient by this one farmer.

Q 98) Did you face any problems buying inputs after the first year?

Y **13 %** (1)

N **88 %** (7)

In this case, the problem faced was one of access to money, not difficulty in finding the needed inputs.

Q 99) What benefits have you got from the horticulture toolkit? (e.g. higher yield, better quality, less disease, saved time, didn't need to pay someone else to do the pruning)

4 said "Better quality", 2 said "Higher yield", 2 said "Disease control"

Questionnaire number:	

9.3 Kitchen gardens (kitchen garden beneficiaries; Jawzjan: F)

3 respondents received kitchen gardens, including 1 woman. All 13 kitchen garden packages so far have been distributed to women, and this was simply a case of a male family member answering on the woman's behalf.

2 were delivered in May 2019 and 1 in August 2019, giving about 5 cropping summers so far.

Q 100) Which of the following have you received?

100.1)	Seeds (200 gm)	**100 %** (3)
100.2)	DAP and Urea (50 kg)	**100 %** (3)
100.3)	Pesticides (200 gm)	**100 %** (3)
100.4)	Watering can	**100 %** (3)
100.5)	Gardening Tools (hand trowel, garden fork, hoe etc)	**100 %** (3)
100.6)	Metal Sign Board	**100 %** (3)

Q 101) Do the kitchen garden and tools received work properly?

Y **100 %** (3)

N 0

. . . . . .

Q 102) Were the inputs appropriate and sufficient for your needs in the first year?

Y **100 %** (3)

N 0

No problems with the quality or quantity of inputs provided by the project.

. . . . . .

Q 103) Did you face any problems buying inputs after the first year?

Y **33 %** (1)

N **67 %** (2)

In each case, the problem faced was one of access to money, not difficulty in finding the needed inputs.

. . . . . .

Production

Q 104) Please tell us about what you grew in your kitchen garden each season:

Season	**Crop**	**Area**	**Production (kg)**	**Price (Afs/kg)**	**How marketed** (use multiple rows if needed)
Spring	Onion (1)	10 Biswa (1,270 m^2)			All crops: District market
Summer	Okra (3)	Av. 6 Biswa (760 m^2)			
	Pepper (1)	3 Biswa (380 m^2)			
	Tomato (1)	2 Biswa (250 m^2)			
Autumn	Coriander (1)	5 Biswa (630 m^2)			

9 crops were grown, mostly cropping in summer. Second crops were grown twice in around 5 beneficiary-years.

All produce was sold at the district market, with all beneficiaries growing for commercial sale rather than household consumption.

Average revenue per crop was $ 325; average revenue per beneficiary per year was around $ 585.

Q 105) Have you faced problems marketing your kitchen garden crops? Y/N

Y **67 %** (2)

N **33 %** (1)

A very small sample responded to this question but, as with vegetable trellising, marketing does seem to be an issue.

. . . . . .

Technical issues

Q 106) Have you faced technical problems in growing kitchen garden crops? Y/N

Y **0**

N **100 %** (3)

No technical problems reported.

. . . . . .

Q 107) Do you think other people will try to follow your example and build a kitchen garden? Y / N

Y **100 %** (3)

N **0**

This is the cheapest of all the livelihoods interventions ($ 220) and has a payback period of just 5 months, so it should be easy to replicate provided the marketing challenges can be overcome.

. . . . . .

Q 108) Any other comments about the kitchen garden? Y/N

All 3 respondents said they needed more seeds.

. . . . . .

Questionnaire number:	

9.4 Nurseries (nursery beneficiaries; Nangarhar)

3 respondents received nurseries, all men.

1 was delivered in August 2019, 1 in January 2020 and 1 in May 2020. All reported raising plants in 2020 but none are yet ready for sale.

Supplies & inputs

Q 109) Which of the following did you receive?

109.1) Rootstock seeds **100 %** (3)
109.2) Citrus saplings/buds **100 %** (3)
109.3) Tool package **100 %** (3)
109.4) Fertiliser package **100 %** (3)
109.5) Pesticide package **100 %** (3)

Q 110) Do the nursery, inputs and tools work properly?

Yes **100 %** (3)
No 0

Q 111) Were the inputs appropriate and sufficient for your needs in the first year?

Yes **100 %** (3)
No 0

No problems with the quality or quantity of inputs provided by the project.

Q 112) Did you face any problems buying inputs after the first year?

Yes **33 %** (1)
No **67 %** (2)

In the one case, the problem faced was one of access to money, not difficulty in finding the needed inputs.

Cropping

Q 113) Please tell us about how much produce you got from the nursery?

Year	Number produced	Number sold	Price (Afs/plant)	How marketed
2020	Av. 5,300 (1,000; 5,000 & 10,000)	None sold so far		

None of the plants has yet become ready for sale, so no data are available on income or marketing.

Q 114) Have you faced problems marketing your nursery produce?

N/A **100 %** (3)

Q 115) Have you faced technical problems in growing nursery?

Yes 0
No **100 %** (3)

No technical problems reported.

Q 116) Do you think other people will try to follow your example and set up a citrus nursery?

Yes **100 %** (3)
No 0

As with every other intervention (with only one exception) all respondents said that others would emulate them. This almost universal response may simply be a way of respondents expressing their satisfaction and trying to give a positive impression.

Q 117) Any other comments about the nursery?

No comments.

Questionnaire number:	

10 Attitudes of beneficiaries (Lead Farmers and other beneficiaries)

Q 118) How satisfied are you with the support you have received from the project:

Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Not applicable
0% (0)	**0% (**0)	**0% (**0)	**20% (**18)	**80% (**72)	
☐	☐	☐	☐	☐	☐

All beneficiaries said they were satisfied or very satisfied.

Q 119) Explanation and comments for your answer to the above question.

_____

_____

_____

_____

Beneficiaries are quite satisfied with the team and management of CDRRP, with the technical support and quality of interventions which have led to their increased income and production, and with their familiarity with new agricultural techniques.

Q 120) What support would you like to receive from the project in future.

_____

_____

_____

_____

Beneficiaries want the project to give them the required support for at least the next couple of years before they could take full advantage of the support they received and generate income in a sustainable way.

Q 121) How often do you get advice from the project staff or DAIL (if asked from a lead farmer) or from a lead farmer (if asked from another beneficiary)?

- ☐ On a daily basis **5%** (5)
- ☐ On a weekly basis **28%** (31)
- ☐ On a monthly basis **44%** (49)

- ☐ On a yearly basis **5%** (6)
- ☐ Don't receive any advice **18%** (20)
- ☐ Not sure/ Don't know

Advice is most commonly received on a monthly basis.

Q 122) How useful do you find this advice – how satisfied are you with it?

Very dissatisfied **0%** (0)	Dissatisfied **0% (**0)	Neither satisfied nor dissatisfied **9% (**8)	Satisfied **46%** (42)	Very satisfied **45%** (41)	Not applicable
☐	☐	☐	☐	☐	☐

91 % said they were satisfied or very satisfied, with none directly expressing dissatisfaction.

Project beneficiaries are generally satisfied with their level of communication with the Lead Farmers and with the Lead Farmers' ability to address any technical or administrative issues in a timely manner. Male Lead Farmers are more active and engaged with the community compared to female Lead Farmers, which could potentially be due to context-related challenges to females in the community.

Q 123) Do you have suggestions for what the project might do better?

_____

_____

_____

_____

It is clear that communities want more support from the CDRRP project, given that they have seen some of the benefits the project interventions have brought. Lead Farmers have requested higher salaries, adding that their current salaries are not worth their full-time commitment to the project.

Thank and close.

Questionnaire number:	

11 Attitudes of non-beneficiaries (non-beneficiaries)

Q 124) Are you aware of the CDRRP project? Y/N **70%** (14) Yes **30%** (6) No

Most people are aware because of the regular community council meetings, livelihood projects within the community.

If No, thank and close.

Q 125) Would you like to have been included in the project? Y/N **100%(**20)Yes
0% (0) No

The general perception about the project and its benefits is very positive, all non-beneficiaries think that beneficiaries of CDRRP project are at an advantage in terms of better income, high production, improved knowledge and information on new agricultural practices.

Q 126) Why/why not?

. . . . . .

. . . . . .

Q 127) Do you know why you were not selected?

. . . . . .

. . . . . .

Unlike some of the other projects, CDRRP beneficiary selection mechanism was regarded as just and reasonable by non-beneficiaries in the project communities. Limited number of project interventions in each community, low awareness regarding the project and inability to match funds to get the project support were some of the main reasons for non-selection by the non-beneficiaries.

Q 128) Have you had any contact with the project (meetings, training, etc)?

. . . . . .

. . . . . .

Thank and close.

12 Survey design and interview methodology (not part of Qre)

The project structure is:

- 2 Provinces × 3 Districts per province × 5 Communities per district = 30 Communities

The interview plan is a 50 % sample of communities, with a slightly greater weighting on Nangahar province where field visits and face-to-face interview will be possible:

- Nangahar: 3 Districts per province × 3 Communities per district = 9 Communities
- Jawzjan: 3 Districts per province × 2 Communities per district = 6 Communities
- Total = **15 Communities**

Within each selected community, the survey will aim to cover:

- Both Lead Farmers (male + female) = 15 × 2 = target of **30 Lead Farmers** (some may be unreachable)
- 3-4 beneficiaries (at least 1 female, in line with the 36 % of female beneficiaries in the project to date) = 15 × 3-4 = **45-60 Beneficiaries**
- 1-2 non-beneficiaries (including women where possible) = 15 × 1-2 = **15-30 Non-beneficiaries**
- **Total = 100** interviews (as for CBARD-East)

Practical arrangements take account of the risks of Covid-19 and the serious security situation in Jawzjan:

Nangahar

- Interview Lead Farmers by phone
- Interview some Beneficiaries by phone
- Visit some communities to:
    - Interview some Beneficiaries in person
    - Physically see some livelihoods interventions and some infrastructure interventions
    - Find and interview Non-beneficiaries

Jawzjan

The National Evaluator cannot travel safely to Jawzjan, as the road from Mazar-al-Sharif is currently controlled by anti-government forces and the evaluator is from a different ethnic group.

The methodology for Nangahar will therefore be applied with the following adjustments:

- Lead farmers, beneficiaries and, of possible, non-beneficiaries will be interviewed by phone.
- The project team in Sheberghan will be interviewed virtually..

Data will be entered and analysed in Excel, with appropriate coding of open-ended results. The International Evaluator will lead spreadsheet design and analysis, and the National Evaluator will enter the data, with textual responses entered directly in English.

Annex 5. **Cost-benefit analysis of project interventions**

In order for projects to select the most cost-effective interventions, it is necessary to know both their capital costs to the project and their annual costs and benefits for the beneficiaries.

Several different sources of information are available on intervention costs and benefits, each with its strengths and weaknesses:

a. Intervention costs from project databases

The CDRRP database shows the cost of each contract and the number of interventions and beneficiaries, allowing the average cost to be calculated with reasonable accuracy. Several issues should be noted:

- ***Project cost***: The database records the CDRRP contribution. In addition there is often a beneficiary contribution, though this is normally delivered in kind as land or labour and so cannot readily be costed.
- ***Shared interventions***: In some cases, one intervention such as a greenhouse is shared by several beneficiaries, so the cost should be calculated per intervention rather than per beneficiary. The calculations aim to do this but there may still be minor data errors.
- ***Milk Collection Centres***: It is hard to define and quantify the number of beneficiaries for the Milk Collection Centres – should it include only the people who own the centre, or all farmers who supply milk to it?
- ***Community infrastructure***: Most of the infrastructure interventions are highly site-specific and so the average cost has little meaning; even the most standardised item, water reservoirs, vary from $ 30-67,000. In this case, cost-benefit analysis would need to be carried out for each individual intervention.
- ***Training & administration costs***: Most individual beneficiaries receive some training related to their interventions, either from project staff or from Lead Farmers who had been previously trained by the project. In all cases there are administrative costs to the project in planning, delivering and monitoring the interventions, whether to individuals or to communities. None of these overhead costs are currently included in the cost-benefit analysis; looking at the project budget, approximately 12 ½ % could be added to the cost of Component 3 interventions to cover administration and training[60].

Average costs from the CBARD projects were also reviewed to check economy in procurement; data came from those projects' databases and were analysed during their Mid-Term Evaluations.

[60] The budget for Component 3 includes $ 48,000 for staff and $ 3,003,445 for contracts for the interventions, so direct staff costs add **1.6 %**.

Of the overall Project Management Unit (PMU) cost of $ 601,150 + $ 45.600 for MTR, a share of 52.1 % may be allocated to Component 3, in proportion to its share in Components 1-4. This gives a project management cost of $ 339,695 or the equivalent of **11.1 %** of contracts under Component 3.

The total overhead to be added to Component 3 contracts is therefore 1.6 % + 11.1 % = **12.7 %**.

b. Annual costs and benefits from CDRRP project surveys

The project carried out a small survey of 14 beneficiaries, half in each province. It covered 9 different interventions, with 1-3 beneficiaries per intervention. Beneficiaries were asked to state their annual income before and after the intervention. Each beneficiary was linked to a specific contract, so the capital cost of each intervention was known with some precision.

Issues to note here include:

- ***Very small sample size***: With only a single beneficiary for most interventions, and a maximum of three, the results are highly dependent on which beneficiaries were selected. If there was a tendency to select better-than-average beneficiaries, this could seriously bias the results. Overall, there is a high coefficient of variation, with the annual benefit from the highest-performing beneficiary of each intervention typically around twice that of the lowest-performing.
- ***Recall issues***: Beneficiaries stated their typical previous income as a range. Both this and the post-intervention income were from recall rather than from records, but this applies to almost all available estimates of farm costs and benefits.
- ***Home-consumed milk***: The previous income for "Dairy toolkits" was taken as zero, as neither of these two beneficiaries previously sold milk or dairy products. If the milk now sold was previously consumed by the household or fed to livestock, this would under-estimated the previous value and hence over-estimate the benefit of the intervention.
- ***Milk collection centres***: Data are for three individuals who supplied milk to and worked in the milk collection centres. They do not cover all farmers who supplied milk to these centres, and so under-estimate the benefit of the intervention.

Results are summarised on the following page. "5-year BCR" is the Benefit:Cost Ratio calculated as 5 times the annual benefit, divided by the project cost.

The project is planning new surveys to get better information on costs and benefits. It has not yet made any estimate of the benefits from community infrastructure interventions but is planning to cover irrigation along with livelihoods interventions in the future surveys.

Benefits and costs of livelihoods interventions, from CDRRP project survey

Intervention	Num beneficiaries	Average of $ before	Average of $ after	Average of $ gain	Average of $ cost per ben	Payback period
Dairy	5	$ 175	$ 882	$ 708	$ 1,285	1.8 yrs
Dairy toolkit	2	$ 0	$ 492	$ 492	$ 277	0.6 yrs
0J006	1	$ 0	$ 234	$ 234	$ 373	1.6 yrs
0N006	1	$ 0	$ 750	$ 750	$ 181	0.2 yrs
Milk collection centre	3	$ 291	$ 1,143	$ 852	$ 1,957	2.3 yrs
0N004	1	$ 857	$ 2,026	$ 1,169	$ 4,642	4.0 yrs
1J017	1	$ 16	$ 779	$ 763	$ 601	0.8 yrs
1J022	1	$ 0	$ 623	$ 623	$ 630	1.0 yrs
Food	1	$ 0	$ 623	$ 623	$ 768	1.2 yrs
Food processing	1	$ 0	$ 623	$ 623	$ 768	1.2 yrs
1J005	1	$ 0	$ 623	$ 623	$ 768	1.2 yrs
Greenhouse	4	$ 24	$ 948	$ 924	$ 2,052	2.2 yrs
Greenhouse, macro	2	$ 33	$ 1,377	$ 1,343	$ 2,927	2.2 yrs
1J019	1	$ 29	$ 935	$ 906	$ 3,453	3.8 yrs
1N024	1	$ 38	$ 1,818	$ 1,781	$ 2,400	1.3 yrs
Greenhouse, micro	2	$ 15	$ 519	$ 504	$ 1,178	2.3 yrs
1J011	1	$ 14	$ 390	$ 375	$ 1,003	2.7 yrs
1N032	1	$ 16	$ 649	$ 633	$ 1,353	2.1 yrs
Horticulture	4	$ 88	$ 1,127	$ 1,040	$ 1,836	1.8 yrs
Drip irrigation	1	$ 0	$ 974	$ 974	$ 4,085	4.2 yrs
1N020	1	$ 0	$ 974	$ 974	$ 4,085	4.2 yrs
Nursery	1	$ 39	$ 1,964	$ 1,925	$ 1,504	0.8 yrs
1N016	1	$ 39	$ 1,964	$ 1,925	$ 1,504	0.8 yrs
Vegetable trellising	1	$ 227	$ 1,312	$ 1,084	$ 1,405	1.3 yrs
1N040	1	$ 227	$ 1,312	$ 1,084	$ 1,405	1.3 yrs
Orchard toolkit	1	$ 84	$ 260	$ 175	$ 350	2.0 yrs
0J007	1	$ 84	$ 260	$ 175	$ 350	2.0 yrs
Grand Total	**14**	**$ 94**	**$ 953**	**$ 858**	**$ 1,625**	**1.9 yrs**

c. Annual costs and benefits from CDRRP MTR survey

The field survey for this mid-term review covered all types of livelihoods interventions except for drip irrigation and food processing, for which only 2 and 5 interventions, respectively, had been completed by the time of the survey. Usable estimates on on-farm benefits were obtained for dairy toolkits, macro greenhouses, vegetable trellising and kitchen gardens. None of the nursery beneficiaries interviewed had yet grown plants to the stage of being ready to sell, so no income data were available, and it was hard to assess the benefits of the milk collections centres involving multiple people. The questionnaire form did not seek to quantify and value the output from micro greenhouses as it was expected that most beneficiaries would consume some or all of the output at home; this assumption turned out to be correct, with only 3 of the 10 respondents marketing all their produce.

This resulted in usable data for four types of intervention:

Table 12: Benefits of livelihoods interventions reported in the MTR survey

Intervention	Num. respondents	Av. cost	Income before	Income after	Annual benefit	ROI	Payback period
Dairy toolkit	6	$ 240	$ 626	$ 1,041	$ 415	173%	7 months
Macro GH	9	$ 3,321	$ 65	$ 222	$ 157	5%	20 yrs 7 months
Veg. trellising	7	$ 1,379	$ 264	$ 1,464	$ 1,200	87%	1 yrs 2 months
Kitchen gardens	3	$ 323		$ 585	$ 585	262%	5 months

Source: MTR field survey

Please note the following:

- ***Num. respondents***: The number of respondents in the survey who had received the intervention in time to generate an income for at least one season.
- ***Av. cost***: Average cost per intervention, from all relevant contracts in the CDRRP project database (see section *a* above).
- ***Income before***: Average annual income from this activity in the year before the intervention. As quoted by the respondents except for:
  - Vegetable trellising: Income before estimated from information supplied by the project and given in Annex 2. Description of interventions.
  - Kitchen gardens: It is assumed that these small areas of land would previously have been used for arable crops with a very low income.
- ***Income after***: Average annual income after the activity. In cases where beneficiaries had planted but not yet harvested second crops, their final income was estimated from the results of others who had already marketed the same second crop.
- ***Annual benefit***: *Income after* minus *Income before*. Does not consider variable costs and so shows the increase in revenue rather than in gross margin, making this something of an over-estimate of net benefit
- ***ROI***: Undiscounted annual Return on Investment, calculated as *Annual benefit* divided by *Av. cost*.

- ***Payback period***: Average time for the cumulative increase in revenue to equal the intervention cost.

These results show a tremendous variation in the rate of return on investment. Both dairy toolkits and kitchen gardens show an exceptionally high return on investment (170-260 %), with a payback period of around 6 months. Vegetable trellising also shows a very high return on investment (90 %) and a payback period of just over one year. All three seem to be investments that farmers could be likely to emulate from their own resources, given adequate access to finance, inputs and knowledge.

Macro greenhouses, on the contrary, show a return on investment of just 5 % and a payback period of over 20 years. No commercial farmer would invest for such a low return, but there is considerable variation between individual beneficiaries and between these data and those from other sources. The project should seek to get a more reliable estimate of returns, and a better understanding of the causes of good and bad performance, before devoting further funds to this activity.

Potential gains from reallocation of resources

The 25 beneficiaries in the above dataset received interventions that cost a total of $ 41,000 and brought an annual increase in revenue of $ 14,000, giving a Return on Investment of 34 %.

For the cost of 1 macro greenhouse, the project could instead have delivered 4 dairy toolkits, 4 kitchen garden packages and 1 vegetable trellising system. Reallocating the funds from all 9 macro greenhouses in this way would have increased the number of beneficiaries from 25 to 97 and increased the annual benefit from $ 14,000 to $ 59,000 for no increase in capital cost. Overall Return on Investment would have risen from 34 % to 146 %.

However, if the returns to macro greenhouses were higher than estimated here, or could be made higher by good extension or better selection of beneficiaries, then the returns from the original allocation would be higher. In this case, the potential benefits of reallocation would be lower but almost certainly would still be positive, as several different sources show that macro greenhouses have one of the lowest returns on investment of all livelihoods interventions.

d. Annual costs and benefits from CBARD-E MTE survey

The Mid-Term Evaluation of the CBARD-East project included a field survey broadly similar to the one done for this CDRRP Mid-Term Review. CBARD included three interventions that were identical to those under CDRRP – macro greenhouses, micro greenhouses and kitchen gardens – but the MTE survey only recorded data on revenues from macro greenhouses.

Usable data were obtained from 20 greenhouse beneficiaries. Results showed a revenue of $ 130-390 per crop and an average of 1.4 crops per year from the first beneficiaries, giving an average annual revenue of around $ 360.

e. Gross Margins calculated by other projects

The CBARD economist compiled gross margin budgets for both macro and micro greenhouses, based on estimates of yields, inputs and prices provided by the project agronomist. No reliable estimates could be made of gross margins from kitchen gardens, and none of the other CDRRP interventions was included in CBARD.

Macro greenhouses

Estimated Gross Margins were $ 1,400 from a first crop of cucumbers and $ 1,200 from a second crop of tomatoes, giving a total of $ 2,600 for growers who produced two crops per year.

Micro greenhouses

Gross Margins were estimated in a similar way for 60 m^3 micro greenhouses in Nangarhar. Excluding the first year with its capital costs, average annual gross margin was estimated at $ 1,070. Estimated costs of seeds and periodic maintenance absorbed only 6 % of total revenue, so simply measuring output quantity and sale price would give most of the story.

Results in practice

Both the CBARD-E MTE survey and the CDRRP MTR survey found that yields and revenues from macro greenhouses usually much lower than these forecasts, and that less than half of farmers regularly produced a second crop.

To investigate this discrepancy, the CBARD team revisited its estimates, using a combination of new survey data, market prices and findings from various projects. Results for Badghis and Farah provinces are given below; please note that these are for 400 m^2 greenhouses, so all values should be reduced by 25 % to compare with the 301 m^2 greenhouses under CDRRP:

Gross margin performance: Badghis 2018 and 2019 (US$)		
	2018	**2019**
Target gross margin	1,900	1,900
Average: top quintile of farmers	1,554	2,230
Average: second quintile	904	914
Average: other quintiles	248	481
Average: all	626	940
Gross margin performance: Farah (2018 and 2019) (US$)	**2018**	**2019**
Target gross margin	1,460	1,460
Average: top quintile of farmers	2,191	339
Average: second quintile	1,681	274
Average: other quintiles	1,046	51
Average: all	1,379	157
Note: results in Farah are for farmers who produced two crops per year		

Source: Financial analysis of CBARD greenhouses; 4th March 2020, Nick Maddock, CBARD economist.

Several points should be noted:

- There is great variation in performance between farmers, even within the same province and the same year, with the top quintile (top 20 %) generating on average 6 times the gross margin of the bottom 60 %,
- There was also substantial variation between years, with the very poor performance in Farah province in 2019 attributed to a price crash caused by an over-supply of greenhouses from multiple projects.
- The results for Farah reflect only those 37 % of farmers who actually grew a second crop.

- Across three provinces (Badghis, Farah and Nangarhar), a total of 556 greenhouses had been completed by the time of the survey but only 250 (43 %) had actually been planted. The unplanted greenhouses were excluded from the survey and the gross margin analysis.

Average annual gross margin across both provinces and both years was $ 775, which equates to around $ 580 for a 300 m^2 macro greenhouse.

Comparing these survey results with the initial gross margins suggests that the agronomist's forecasts should be treated more as a target that farmers should aim for, rather than an indication of average performance in practice.

f. Conclusions on macro greenhouses

Macro greenhouses represent almost half of total livelihoods expenditure under CDRRP so far and are an intervention that has been used and studied by multiple projects for several years. The findings above can be summarised as follows:

Information source	Total num. crops	Measure	Average annual value
CBARD MTE survey	17	Revenue	$ 360
CBARD project survey	169*	Gross margin	$ 580
CDRRP project survey	2	Increase in revenue	$ 924
CDRRP MTR survey	8	Revenue	$ 222

Source: As quoted in the table and discussed in this annex.
**The CBARD project assessment gathered some information on greenhouses planted with a total of 160 crops but yield data were based on a smaller sample. Gross margin adjusted to 300 m^2.*

There is still considerable variation between these different measures. Giving less weight to the highest and the lowest values, which are also based on relatively few observations, suggests that the annual return from a 300 m^2 macro greenhouse is normally in the range of $ 300-600. An annual revenue of $ 500 and a capital cost of $ 3,230 would give an undiscounted annual Return on Investment of 15 % and a payback period of 6 ½ years.

However, given the wide variation in estimated performance, there is a clear need for all livelihoods projects to conduct regular field surveys and compile realistic gross margin budgets to inform project planning.

Annex 6. Suggested approach to design of a project database

This annex sets out an overall approach to developing a project management database that can be used by all community-based UNDP projects, including CDRRP, CBARD-W, CBARD-E and CCAP.

Elements *(database tables)*

All tables should have one unique code per record (the "Primary Key"), which should be used to establish links between tables.

No data should be duplicated within one table, other than codes to link records to another table ("Foreign keys"). For example, if one person attends three training events, his or her name, gender, ID number and contact number should be stored just once in a table of people or trainees, not repeated three times in a table of training events. This prevents storing conflicting data about the same person, thing or event.

No user should be allowed to enter data without a valid code. The system should either allow users to create new records and generate new automatic codes, or could include a set of temporary codes so that a user can carry on and enter new beneficiaries, trainees etc. which the administrator would later add to the relevant table.

Place

3-level hierarchy, stored either as three linked and fully-normalised tables or as one flattened table:

- Province
    - District
        - Community

Enter a complete national list of places with consistent internal coding. Also show any different coding systems in use by institutions with which the project might exchange data.

Choose one name and spelling for consistent use in project reports. Also include a lookup table with other spellings that the project encounters and make it easy for users to submit new spellings to be added to the list.

These tables will need to be maintained, as the reality is that communities and other administrative regions are periodically merged, split, renamed, assigned to a different higher-level region or have their boundaries changed. The database should note each change so that historic data can be interpreted according to the definitions at that time.

Person

There should be only one table of people, with fields to record attributes such as whether they are a Lead Farmer, Beneficiary &/or Trainee. Each person should be entered only once, so a correction to their name, ID, contact number etc. will apply to all linked records.

Every person must be assigned a unique identifier for internal use. This should recognise the multiple practical issues, including different people with the same name, different transliterations into Latin script, abbreviation of common names and terms such as "Mhd.", people without ID cards giving the number of a family member and those without a phone giving someone else's number. It might be best to generate a new internal number for every person and then to allow a lookup from ID, name, contact number, etc.

This is a single table:

- Person

Contracts

Contracts have the same kinds of properties (supplier, amount, start date, completion date, etc.) whether they are for works, supplies or services, so the same table can cover all kinds of contracted expenditure.

Contracts may change over time, being amended, extended or cancelled, so this needs to be tracked with a separate record for each version of a contract, tied together by a unique code. This could be shown in a 2-level hierarchy:

- Contract
    - Contract_version

Contracts also have a status that changes over time as they are prepared, signed, implemented and completed. If the various stages can be defined, then a date field can be used for each (e.g. Date of signature; Date of start of performance; Date of completion; Date of approval) and the current status can be seen from the latest date across these fields.

Payments

Payments are linked to contracts, with one contract often having several payments. The sum of all payments for a completed contract should tie up with the amount in the last contract record.

This is a single table:

- Payment

Suppliers

All contracts involve suppliers, and it should be possible to define contracts and suppliers so that one contract has only one supplier, though one supplier may deliver several contracts.

Suppliers may be physical people or legal entities. One approach would be to have a "Primary contact" for every supplier, which is stored in the Person table with "Type" set to "Supplier".

This is a single table:

- Supplier

CDCs

CDCs are institutions, with one president and several board members. They might be shown as a separate table, recording just the president and the primary contact (which would be the same person):

- CDC

Alternatively, both suppliers and CDCs could be stored in a single table of Institutions, analogous to the use of a single Person table for beneficiaries, trainees, lead farmers and institutional contact points. This suggests a three-stage approach:

- Institution_type (e.g. Supplier, CDC)
    - Institution (e.g. one specific CDC)
        - Institution_Member* (e.g. one record for each member of the institution that the project deals with by name, with a field to record their role in the institution; links to table Person)

Interventions

One kind of intervention (e.g. a macro greenhouse) may be repeated many times in the project, one intervention may be shared between several people (e.g. a shared greenhouse), and one person may receive more than one intervention. These relationships can be shown correctly with the following structure:

- Intervention_type (e.g. greenhouse)
    - Intervention_subtype (e.g. macro greenhouse)
        - Intervention (e.g. one specific macro greenhouse in a particular location)
            - Intervention_Beneficiary* (e.g. one record for each person sharing this greenhouse; links to table People)

It is not strictly necessary to have intervention sub-types, but in practice it is useful for reporting.

Training

Training can follow the same structure as interventions:

- Training_type (e.g. livelihoods training)
    - Training_subtype (e.g. greenhouse management)
        - Training_event (e.g. training on greenhouse management delivered at a particular place and date)
            - Training_Trainee* (e.g. one record for each person who attended this training event; links to table People)

In principle, training could be treated as just another intervention and be stored in the same data structure. The programmer should consider which approach would be easiest to maintain and which would be most convenient for reporting, e.g. to see what training courses were delivered to greenhouse beneficiaries.

Bridge tables

All tables marked with a * are "bridge tables" used to implement a many-to-many relationship. In their simplest form they consist of just two columns: one for the key from the first table and one for the key from the second table. If they represent a link that changes over time, it can be useful to include From_date and To_date. If the link can differ in nature, then another field can record the kind of link.

An example of a detailed bridge table linking institutions to people could be:

Institution_key	Person_key	From_date	To_date	Relationship	Notes
< CDC 1 >	< Person 1 >	23/4/2020		President	
< CDC 1 >	< Person 2 >	23/4/2020		Contact point	
< Supplier 1 >	< Person 3 >	3/5/2020	24/11/2020	Contact point	
< Supplier 1 >	< Person 4 >	25/11/2020		Contact point	Took over from XXX
Etc.					

Practical implementation

The data should be stored in a relational database, with data-entry forms designed to cover all of the events in which data are entered or amended (e.g. new intervention type designed, new beneficiaries added, training event held, field monitoring conducted). This requires care and the skills of an experienced database designer, willing to spend time with project staff in different parts of the organisation to understand their needs and create something that will be reliable and easy for them to use.

Analysis and reporting can most flexibly be done in Excel, using a PowerPoint model that mirrors the internal structure of the database. It can either use data exported regularly from the database (e.g. by running a database query to produce a new data file at the end of each week or month) or can use PowerQuery in Excel to link directly to the database and allow the user to update the information whenever required.

This split approach focusses the database designer's skills on making a sound internal structure and creating robust data-entry forms, and lets the managers and monitoring staff use their existing spreadsheet skills to create whatever new reports they need without having to go back to the database programmer each time.

Annex 7. **MTR timetable**

Date	Activity
1st October, 2020	Contract start date
7th October, 2020	Start-up meeting by Zoom
5th November, 2020	First draft Inception Report submitted
10th November, 2020	Start of interviews with stakeholders
24th November, 2020	Draft Inception report discussed with UNDP Bangkok
25th-26th November, 2020	Piloting of field survey
4th December, 2020	Final Inception Report submitted
10th-20th December, 2020	Field survey, Nangarhar
22nd December, 2020	Virtual presentation of main findings
23rd-31st December, 2020	Field survey, Jawzjan
26th January, 2021	First draft MTR report submitted
15th Feb-5th March, 2021	Comments received from reviewers (audit trail documents have been provided as separate attachments)
3rd March, 2021	Draft report presented to Project Board
10th March, 2021	Final report submitted

Annex 8. List of meetings and people interviewed

Date	Participants	Venue or mechanism
Thursday, November 12th, 2020	1) Yasir Nassery, **CDRRP** Project Manager, MAIL 2) M. Salim, **UNDP** Program Analyst, CDRRP Project Focal Point 3) Sharif Wahdati – CDRRP MTR National Evaluator	MAIL CDRRP Office
Wednesday, November 18th, 2020	1) Yasir Nassery, **CDRRP** Project Manager, MAIL 2) Habibullah Habib, **CDRRP** EWS Specialist 3) Sharifullah Akrami, **CDRRP** Climate Change Adaptation Specialist 4) Sharif Wahdati – CDRRP MTR National Evaluator	MAIL CDRRP Office
Thursday, November 19th, 2020	1) Shirin Agha, **ANDMA** Senior Advisor, CDRRP Project Board Member 2) Steve Goss, CDRRP MTR International Evaluator 3) Sharif Wahdati – CDRRP MTR National Evaluator	Zoom
Saturday, November 21st, 2020	1) Idrees Malyar, **NEPA** Deputy Minister, CDRRP Project Board Member 2) Steve Goss, CDRRP MTR International Evaluator 3) Sharif Wahdati – CDRRP MTR National Evaluator	Zoom
Sunday, November 22nd, 2020	1) Najia Kharoti, **MRRD** Senior Advisor, CDRRP Project Board Member 2) Sharif Wahdati – CDRRP MTR National Evaluator	Phone interview
Monday, November 23rd, 2020	1) **CDRRP** Project team in Nangarhar including Provincial Coordinator, Livelihoods Officer, Gender Officer, Infrastructure Engineer, Community Mobilizer 2) Sharif Wahdati – CDRRP MTR National Evaluator	CDRRP Office, Nangarhar

Date	Participants	Venue or mechanism
Tuesday, November 24th, 2020	1) Karma Rapten, Technical Advisor, **UNDP** Bangkok 2) M. Salim, **UNDP** Program Analyst, CDRRP Project Focal Point 3) Steve Goss, CDRRP MTR International Evaluator 4) Sharif Wahdati – CDRRP MTR National Evaluator	Zoom
Wednesday, November 25th, 2020	Pilot interviews with **beneficiaries** at CDRRP project office in Nangarhar by Sharif Wahdati	In-person
Thursday, November 26th, 2020	Pilot focus group with 5 **lead farmers** in Khewa district of Nangarhar by Sharif Wahdati	In-person
December 10-20th, 2020	Nangarhar Data Collection (Field visits; 63 **respondents**)	Project intervention sites
Monday, December 21st, 2020	1) **CDRRP** Project team in Jawzjan including, Livelihoods Officer, Gender Officer, Infrastructure Engineer, Community Mobilizer 2) Sharif Wahdati – CDRRP MTR National Evaluator	Virtual Meeting
December 23rd – 31st, 2020	Jawzjan Data Collection (Phone interviews; 48 **respondents**)	Phone interviews

In addition, detailed exchanges by e-mail and Skype were held with the following members of the CDRRP project team:

- Emily Yao, International M&E Specialist
- Tahira Khaliqyar, Senior Gender Specialist and technical advisor on livelihoods (Kabul)
- Sharifullah Akrami, Climate Change Adaptation Specialist (Kabul)
- Habibulla Habib, Senior Technical Specialist on infrastructure (Kabul)
- Mukhtiar Himat, Livelihood Officer (Jawzjan)

Annex 9. **Documents reviewed**

a. Project documents

Access has been provided to the project's Google Drive folder structure containing an extensive range of documents. The following documents have been downloaded from the drive or received directly.

Core project documents

- CDRRP Project Document
- CDRRP Inception Report
- CDRRP Logframe (as amended on 5th December 2018)
- CDRRP M&E plan
- CDRRP Baseline Survey & Needs Assessment

Project regular reports

- **Quarterly Reports**:

  Normally three Quarterly Reports are produced each year, with the fourth replaced by the Annual Progress Report.
  - CDRRP QPR 2018 Q4 (1st quarter of project)
  - CDRRP QPR 2019 Q1
  - CDRRP QPR 2019 Q2
  - CDRRP QPR 2019 Q3
  - CDRRP QPR 2020 Q1
  - CDRRP QPR 2020 Q2
- **Annual Progress Reports**:
  - CDRRP APR 2017
  - CDRRP APR 2018
  - CDRRP APR 2019
  - CDRRP APR 2020 (draft)
- **Project Implementation Reports**:

  The first Progress Implementation Report was produced in 2019.
  - CDRRP PIR 2019
  - CDRRP PIR 2020

Project planning documents

- **Annual Work Plans**:
  - CDRRP AWP 2017
  - CDRRP AWP 2018
  - CDRRP AWP 2019
- **Procurement Plans**:
  - CDRRP PP 2017

- CDRRP PP 2018
- CDRRP PP 2019

- **Human Resource plans**:
  - CDRRP HRP 2017
  - CDRRP HRP 2018
  - CDRRP HRP 2019
- **Hazard Risk Mapping and Vulnerability Assessments:**
  - HRMVAs for all 30 project communities – in shared drive

Other project documents

- **Manuals & resources**:
  - CDRRP Climate Change Adaptation Toolkit

Independent control reports

- **Spot Check Reports**:
  - CDRRP SCR 2018 - Jan-Sept
  - CDRRP SC 2019 - Jan-July
- **Audit Observations**:
  - CDRRB AOB 2019

b. Other UN and World Bank documents

UN

- *One UN for Afghanistan: 1 January 2018 – 31 December 2021*.
- *Country programme document for Afghanistan (2015-2019)*.
- *United Nations Development Assistance Framework*: 2010-2013.

World Bank

- *Strengthening hydromet and early warning services in Afghanistan: a road map*. World Bank (2018)

c. Documents on related projects

AREDP & RED

- *Independent Evaluation of the AREDP REDKAN and RED-Helmand projects: Final Report.* Erik Lyby and Sayed Ahmad Rohani, March 2014.

d. Government documents

General

- *Agribusiness Charter, Comprehensive Strategy and Action Plan: 2018-2023*. Government of the Islamic Republic of Afghanistan; July 2018.

- *Citizens' Charter National Priority Programme*. Government of the Islamic Republic of Afghanistan; December 2016.
- *Afghanistan National Peace and Development Framework (ANPDF): 2017 to 2021*. Government of the Islamic Republic of Afghanistan (undated).

Climate change and disaster management

- *Afghanistan Climate Change Strategy and Action Plan: 2015*. National Environment Protection Agency, Government of the Islamic Republic of Afghanistan (June 2015).
- *Nationally Appropriate Mitigation Actions for Afghanistan: 2015.* National Environment Protection Agency, Government of the Islamic Republic of Afghanistan (June 2015).
- *National Adaptation Plan for Afghanistan: 2015*. National Environment Protection Agency, Government of the Islamic Republic of Afghanistan (June 2015).
- *Designated National Authority for Clean Development Mechanism (CDM) Projects in Afghanistan: 2015*. National Environment Protection Agency, Government of the Islamic Republic of Afghanistan (June 2015).

e. Other studies and papers

AREU

Afghanistan Research and Evaluation Unit

- *Alternative Livelihoods: Substance or Slogan?* David Mansfield and Adam Pain. AREU Briefing Paper, October 2005.
- *Life in the times of 'late development': Livelihood trajectories in Afghanistan, 2016-2002*. Adam Pain and Danielle Huot. Secure Livelihoods Research Consortium/AREU Working paper 50, February 2017. Funded by the European Commission.

Annex 10. **Signed UNEG Code of Conduct forms**

a. Signed UNEG Code of Conduct form – Steve Goss

UNEG Code of Conduct for Evaluators/Midterm Review Consultants

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.

2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.

3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.

4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.

5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.

6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.

7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

MTR Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Consultant: Dr Steve Goss

Name of Consultancy Organization (where relevant): Individual consultamt

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Belgrade, Serbia on 17th November 2020

Signature: 

b. Signed UNEG Code of Conduct form – Sharif Wahdati

UNEG Code of Conduct for Evaluators/Midterm Review Consultants

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.

2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.

3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.

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6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.

7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

MTR Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Consultant: Sharifullah Wahdati

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Nangarhar, Afghanistan *(Place)* on November 23, 2020 *(Date)*

Signature:

Annex 11. **Signed MTR final report clearance form**

Midterm Review Report Reviewed and Cleared By:

Commissioning Unit (M&E Focal Point)

Name: Syed Haroon Ahmadi

Signature: _____ Date: 28-Mar-2021

Regional Technical Advisor (Nature, Climate and Energy)

Name: Karma Lodey Raptan

Signature: _____ Date: 28-Mar-2021