**Final Evaluation**

**Final Evaluation of the UNDP Project**

**“*Strengthening climate resilience of the Batken Province through the introduction of climate-smart irrigation and mudflow protection measures*”**

**(January 2019 – September 2022)**

**Elinor Bajraktari**

**July 2022**

|  |  |  |
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| **Project Information** | | |
| Project/Outcome title | Strengthening climate resilience of the Batken Province of the Kyrgyz Republic through introduction of climate-smart irrigation and mudflow protection measures. | |
| Atlas ID | 00113942 | |
| Corporate outcome and output | UNDAF **Outcome 3**: By 2022, communities and institutions are more resilient to climate and disaster risks and are engaged in sustainable and inclusive natural resource management and risk-informed development.  **Output 3.1**: Policy, legal and institutional systems enhanced to apply innovative climate change mitigation and adaptation practices across the country.  **Output 3.3**: Innovative and smart solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste, for better livelihoods and employment, with focus on women and youth. | |
| Country | Kyrgyzstan | |
| Region | Batken Province (Oblast) | |
| Date project document signed | 29 March 2019 | |
| Project dates  Total committed budget | **Start** | **End** |
| January 2019 | December 2021, extended to September 2022 |
| US$ 900,000 | |
| Project expenditure at the time of evaluation |  | |
| Funding source | Government of the Russian Federation; UNDP  Contributions of local partners and World Food Programme | |
| Implementing parties | * State Water Resources Agency; * Hydrometeorological Agency under the Ministry of Emergency Situations; * State Administration in Batken region; * Local communities in Batken region. | |

|  |  |  |
| --- | --- | --- |
| **Evaluation Information** | | |
| Evaluation type (project/outcome/thematic/country programme, etc.) | Project Evaluation | |
| Final/midterm review/other | Final Evaluation | |
| Period under evaluation  Evaluators | **Start** | **End** |
| January 2019 | September 2022 |
| Elinor Bajraktari | |
| Evaluation dates | **Start** | |
| June 2022 | **Completion** |

***ACKNOWLEDGMENTS***

*The author of the report thanks all the stakeholders who participated in and contributed to this evaluation. The effort of many community participants who had to go to specific locations to participate in remote interviews is greatly appreciated. Particular thanks go to the Project Team and the Project Manager who handled the process professionally and were supportive with all aspects of the work.*

**Executive Summary**

This report presents the main findings of the UNDP Project “Strengthening climate resilience of the Batken Province of the Kyrgyz Republic through introduction of climate-smart irrigation and mudflow protection measures” in the Batken Province of the Kyrgyz Republic. The project was envisaged to strengthen the resilience of the Batken community and its objective was to promote best practices in the area of “climate-smart” agriculture, and protection of water infrastructure against hydrological disasters. It was underpinned by a Theory of Change, pursuing the following ultimate goal “Well-being, food and water security and agricultural livelihoods of rural communities and farmers in the Batken region are highly vulnerable to adverse climate change impacts due to low adaptive capacity”.

This evaluation was commissioned by UNDP Kyrgyzstan and was conducted in the period June-July 2022. The scope of this Evaluation covers all the project’s activities from the date the Project Document was signed on 29 March 2019, until the period in which this evaluation was conducted. The evaluation assessed the performance of the project according to OECD DAC criteria and definitions while following the norms and standards established by the United Nations Evaluation Group, guided by UNDP’s evaluation guidelines.

**Relevance**

Given the Kyrgyz Republic’s efforts to adapt its economy and agriculture to climate change impacts, this project has been found to be highly relevant to the national priorities and policies in the area of climate change adaptation. The country’s strategic documents include: the National development Strategy 2018-2040, National Development Program until 2026, State Program for the Development of Irrigation for 2017-2026, Plan for Development, Use and Protection of Water Resources in the Karadarya-Syrdarya-Amudarya Basin, etc.

Furthermore, the project was found to be relevant to the UNDP’s Country Mandate and Strategy, and UN Country Priorities. In fact, it was designed to fully align with, and contribute to the UNDAF Priority III: *“Environment, climate change, and disaster risk management”;* and Outcome 3: *“By 2022, communities and institutions are more resilient to climate and disaster risks and are engaged in sustainable and inclusive natural resource management and risk-informed development”,* while also contributing to Output 3.1. and Output 3.3. of UNDAF.

A participatory vulnerability assessment was conducted in the Batken region, the most vulnerable to climate change. As a result of this assessment the project was able to identify and single out seven municipalities in the three Batken region districts for pilot interventions (Batken, Kadamjai and Leilek). This ensured a higher level of relevance for the project’s activities regarding community needs.

Another dimension of relevance for which the project has been assessed, is the relevance to the Kyrgyz Republic’s achievement of SDGs. It was found that the project has contributed to: SDG2, SDG3, SDG5, SDG6, SDG7, SDG11, SDG12, SDG13, SDG15 and SDG16.

**Coherence**

The project’s design is found to be largely coherent, thanks to UNDP’s extensive experience with local development, environmental protection, climate change adaptation and disaster risk management in the country, while also considering the highly participatory nature of project design. The implementation under UNDP’s “Environment, climate change, and disaster risk management” pillar, aided by the Batken ABD Office, has ensured the coherence of the project with UNDP’s experience in the ABD area.

However, some missed opportunities for closer cooperation with other projects were identified in areas including disaster risk management, conflict mitigation and social cohesion. Nonetheless, the project is expected to inform two upcoming projects, one of them funded by the GCF and the other by the EU.

As pertaining to the UN system’s presence in Kyrgyzstan and its efforts in the country, the project has collaborated with WFP and FAO on the implementation of project activities, providing added synergy within the system. At the same time, the project was attentive to establishing partnerships with development partners, such as the Russian Federation and the World Bank. The former, being the main funder of the project by means of the Russian federation-UNDP Trust Fund, has maintained close collaboration with the project and provided expertise and best practices in the area of climate change, while the latter contributed to the design of the specifications for the four weather stations. The project team’s attempts at collaboration with the Asian Development Bank and USAID did not come to fruition due to a lack of active engagement of these organizations in the Batken region.

**Effectiveness**

**Output 1:** Improved climate information and local capacity for climate-resilient irrigation water management

The main focus under this output has been the provision of support to the Kyrgyzhydoromet for the purchase and installation of four automated weather stations. This activity has not yet been completed, but the project team expects delivery and installation to be completed by September 2022. Under this output, the project provided trainings, especially for farmers in the pilot communities, and supported the national counterparts with knowledge products.

**Output 2:** Expanded application of water-efficient technologies and protection of irrigation systems

Under this output, the project installed drip irrigation technologies in 114 hectares of farm land in the following sub-districts (AOs): Aksuu, Alga, Kulundu, Markaz, Orozbekov, Samarkandek and Tort Gul. A total of 68 farmers benefited from these activities – of whom 53 were men and 15 women, and the total cost of activities was US$ 177,269. Due to the positive reaction of the local communities, and following the April 2021 escalation of the inter-ethnic conflict at the Kyrgyz-Tajik border, an extension was requested to cover additional farmland. A total of 38 farmers are expected to benefit from these additional activities – of whom 35 are males and 3 females, and the total additional cost of these activities is US$ 87,590.

The project also concluded an agreement with the State Agency for Environmental Protection and Forestry on the strengthening of slopes of rehabilitated canals with trees and shrubs in the pilot municipalities, as well as supporting the Ministry of Emergency Situations in the implementation of its programme on Special Preventive and Liquidation Measures which involved the rehabilitation of the mudflow section in Zhayilmasay village through the installation of 210 gabions. The total costs invested in the rehabilitation of irrigation systems and mudflow protection facilities were US$ 181,840, and a description of the interventions is available in the “Effectiveness” chapter of this report.

**Output 3:** Increased awareness and dissemination of best practices to reduce climate vulnerability of local communities

Given this output’s intention to raise awareness and disperse information, it cuts across the other previous two. The project team developed a communication strategy, contracted a media company in order to create professional informational videos, and used official websites and social medias of UNDP and other national partners to disseminate information.

**Impact**

Regarding Output 1, the completion of the installation of weather stations will produce more reliable and precise weather forecasts. While the completed trainings contribute to the strengthening of participants’ skills and capacities.

Regarding Output 2, project’s contributions may be summarized in the bullet points below.

Project Contributions for 2020-2021

* Area under Drip Irrigation Systems - 114 ha
* Water Savings - 420,568 cubic meters (per season)
* Number of Beneficiaries - 68 (53 Male and 15 Female)
* Contributions – Total: US$ 177,269 - US$ 110,500 by the Project (62%) and US$ 66,769 by the communities (38%).

Project Contributions for 2022

* Area under Drip Irrigation Systems - 57 ha
* Water Savings - 270,136 cubic meters (per season)
* Number of Beneficiaries - 38 (35 Male and 3 Female)
* Contributions – Total: US$ 87,590 -- US$ 65,402 by the Project (75%) and US$ 22,188 by the communities (25%).

Regarding Output 3, the information about climate-smart agriculture practices and efficient irrigation systems has become widely available by the project.

**Efficiency**

Project Expenditure and Budget Execution Rates

The project was implemented through the DIM modality, with UNDP responsible for the execution of all project activities. At the time of this evaluation, the budget spent for the implementation of project activities was US $837,699, constituting about 62% of the initial planned budget.

| **No.** | **Outcome Area** | **Budgeted (as per Pro Doc)** | **Spent** | **Execution Rate** |
| --- | --- | --- | --- | --- |
| **Year 2019** | | | | |
| **1** | Outcome 1 | 7,560 | 13,017 | 172% |
| **2** | Outcome 2 | 113,460 | 24,997 | 22% |
| **3** | Outcome 3 | 17,280 | 12,672 | 73% |
| **4** | Project Admin | 62,997 | 25,306 | 40% |
| **6** | **Total** | **201,298** | **75,991** | **38%** |
| **Year 2020** | | | | |
| **1** | Outcome 1 | 58,317 | 15,109 | 26% |
| **2** | Outcome 2 | 228,295 | 260,218 | 114% |
| **3** | Outcome 3 | 17,329 | 15,432 | 89% |
| **4** | Project Admin | 70,967 | 72,430 | 102% |
| **6** | **Total** | **374,907** | **363,188** | **97%** |
| **Year 2021** | | | | |
| **1** | Outcome 1 | 336,214 | 68,261 | 20% |
| **2** | Outcome 2 | 60,480 | 23,264 | 38% |
| **3** | Outcome 3 | 27,346 | 13,971 | 51% |
| **4** | Project Admin | 33,302 | 23,696 | 71% |
| **6** | **Total** | **457,342** | **129,192** | **28%** |
| **Year 2022 (January-March)** | | | | |
| **1** | Outcome 1 | 39,632 | 2,948 | 7% |
| **2** | Outcome 2 | 247,860 | 3,268 | 1% |
| **3** | Outcome 3 | 83,060 |  | 0% |
| **4** | Project Admin | 157,248 | 10,875 | 7% |
| **6** | **Total** | **527,800** | **17,092** | **3%** |
| **ALL YEARS** | | | | |
|  |  |  |  |  |
| **1** | Outcome 1 | 440,231 | 322,174 | 73% |
| **2** | Outcome 2 | 577,230 | 341,143 | 59% |
| **3** | Outcome 3 | 75,000 | 42,075 | 56% |
| **4** | Project Admin | 264,774 | 132,307 | 50% |
| **6** | Total | **1,357,235** | **837,699** | **62%** |

Timeliness of Project Activities

The pace of project activities was heavily impacted by three external forces:

* The COVID-19 had a devastating impact globally, and the project was no exception. The restriction of movement and other restrictive measures impacted the timelines.
* The institutional instability and political unrest that occurred in early 2021 following the announcement of the drafting of a new Constitution diverted the Government’s attention and thus produced additional delays to the project.
* The conflict that occurred in April 2021 on the border of Kyrgyzstan and Tajikistan affected significantly the implementation of project activities on the ground.

As a result of the delays with project implementation, the project team has twice requested extensions of project implementation timelines. The first extension (to the end of the 3rd quarter of 2021) was granted by the Project Board in November 2020. The second extension was granted in September 2021. The second extension (until 30 September 2022) included a revised project schedule with an increased project budget provided by the Russian Federation in the amount of US$ 205,000.

Resource Mobilization

Then project was able to mobilize additional resources, as shown in the figure below.

| **Component Description** | **Requested Budget** | **Co-financing from UNDP and Governments (parallel)** |
| --- | --- | --- |
| **Component 1. Improved climate information and local capacity for climate-resilient irrigation water management.** | **$200 000** | **$120 000** |
| *Activity Result 1.1 Expansion of the network of agro-meteorological observations.* | $66 000 |  |
| *Activity Result 1.2 Development of improved climate information products.* | $63 000 |  |
| *Activity Result 1.3 Development and implementation of training programs for LSGs and WUAs.* | $45 000 |  |
| *Activity Result 1.4 Conduction of climatic researches.* | $23 000 |  |
| *MONITORING* | $3 000 |  |
| **Component 2. Expanded application of water-efficient technologies and protection of irrigation systems:** | **$442 000** | **$1 180 000** |
| *Activity Result 2.1. Identification of sites and locations for the introduction of water-efficient irrigation technologies in target communities.* | $23 500 |  |
| *Activity Result 2.2. Introduction of water-efficient irrigation technologies.* | $220 000 |  |
| *Activity Result 2.3. Identification of on-farm irrigation facilities for carrying out rehabilitation and protection measures.* | $18 000 |  |
| *Activity Result 2.4. Rehabilitation and protection of on-farm irrigation facilities.* | $177 500 |  |
| *MONITORING* | $3000 |  |
| **Component 3: Increased awareness and dissemination of best practices to reduce the climate vulnerability of local communities:** | **$69 000** | **$90 000** |
| *Activity Result 3.1. Development of the Project’s communication strategy, gender mainstreaming plan and information products.* | $28 000 |  |
| *Activity Result 3.2: Conduction of an information campaign "province-district-community" about project in the media.* | $39 000 |  |
| *Monitoring* | $2 000 |  |
| **Project Management, monitoring and evaluation** | **$117 000** | **$40 000** |
| **8% GMS** | **$72 000** |  |
| **TOTAL:** | **$900 000** | **$1 430 000** |
| **SUBTOTAL** | **$2 330 000** | |

Use of Good Practices

The project has made good use of international “good practices” thus preventing redundant activities and providing an additional layer of efficiency. It engaged several experts from the Russian Federation who have shared international best practices.

**Sustainability**

An indicator of sustainability is the perception of stakeholders, which when asked in the process of this evaluation responded that they believe in the sustainability of most of the achievements of the project.

Regarding National Ownership, the crucial role of the Project Board in the decision-making process indicates a high level of national ownership. Under the leadership of the Ministry of Agriculture, Forestry and Water Resources, Ministry of Emergency Situation and State Administration of Batken region, the board has engaged other key members such as the Hydrometeorological Agency (Kyrgyzhydromet), a sub-ordinate structure of the Ministry of Emergency Situations, and the respective district administrations. At the level of implementation, the project’s two main national partners at the central level have been the State Water Resources Agency under the Government of the Kyrgyz Republic and Kyrgyzhydromet. Regular consultations and meetings between the project team, UNDP and the two national partners have taken place in the course of project implementation. At the sub-national level, the project has worked in close cooperation with the Batken Regional Administration, the respective district administrations, and the Local Self-Governments of the targeted communities. Provincial and district authorities were fully engaged in the strategic decisions required at the sub-national level for the implementation of the project.

A crucial indication of ownership, which builds sustainability, is the co-financing and parallel financing generated by the project. Financial resources were pooled from across the partners to fill the gaps, which in the end has increased the feeling of ownership over the results.

Regarding Replication of Activities, the investment of considerable resources in the dissemination of information has been a major aspect of the promotion of irrigation and mudslide prevention technologies. Furthermore, there is already a list of additional farms that could potentially benefit from similar interventions, while provision of financial contributions for the installation of DIS systems by the local communities creates incentives for further investments by the communities themselves in this area. Training has been an important aspect of this project – which contributes to the improvement of capabilities of national and local stakeholders and ensures replication.

**Cross-cutting Themes**

The Batken region, located in the Feghana valley, is situated in the intersection of Kyrgyzstan, Tajikistan and Uzbekistan where confrontations between residents in border areas of the Valley are relatively common. The project has addressed a core issue related to water deficiency and poor access in selected localities, which has certainly served as a prevention intervention against such continuous border disputes over resources. However, despite the significant relevance of the project to conflict prevention and resolution, the project was not designed to address these issues. The Project Document does not contain any references to cross-border violence or conflict; however, the project has surely contributed to the reduction of tension through the improvements it has generated in the availability of water through a more efficient use of the resource.

Given the focus of the project on rural areas and agriculture activities, it has by default had a significant focus on the gender dimension. The project design places women in the project target area at the center of the project by clearly recognizing that they experience specific challenges in their daily lives which are exacerbated by the effects of climate change. The gender strategy has focused on (1) raising the awareness of the overall community of the differential gendered aspects of climate change; (2) ensuring and facilitating the participation of women and vulnerable groups in all aspects of project implementation and (3) specific livelihoods support to poor and vulnerable women.

Overall, the evidence collected for this evaluation indicates that women have been involved in all stages of the project, from planning to implementation and monitoring. They have participated in significant numbers in working groups, trainings, baseline studies and formulation of local adaptation plans, and other project activities. Weaker results were achieved with regards to the ultimate beneficiaries of the drip irrigation systems, who are generally male due to the fact that they are primarily owners of the land.

**Lessons Learned**

***Lesson 1: Dissemination of Innovative Approaches and Technologies Takes Time and Requires Sustained Engagement***

As has been discussed in this report, several interventions by GoK and development partners have taken place in the area of climate change adaptation. The project builds on the foundations laid out by these previous interventions. This kind of sustained engagement is based on the premise that addressing climate change challenges requires collective action. The self-organization of farmers is a crucial aspect of such collective action. Achieving this requires public sector support through incentives for the farmers to participate in collective decision-making and make individual commitments. However, the development of capabilities in the public sector, especially at the sub-national level, is a challenging task that requires a long-term engagement and repeated interactions between projects like the current one and public organizations and local communities.

The experience of this project showed that local authorities and communities develop trust when they see practical results. The project made efforts in the beginning to convince stakeholders of the effectiveness of adaptation measures. Some of the proposed solutions are innovative for the country and require ample and explanatory work on the part of the project and authorities. Further, the grant initiatives were crucial for demonstrating the usefulness and feasibility of various approaches and technologies. As has been noted in this report, while a lot of demonstrative work has taken place under this project, the dissemination of project experiences and results is still work in progress. Construed as a long-term process, this work will need to continue under the leadership of the Government. Interventions such as this project need to be conceived by taking into account the fact that ample time is needed for innovative measures to be accepted and taken up by farmers and thus the need for a lengthy period of engagement with local authorities and communities.

***Lesson 2: Climate Change Adaptation and Social Cohesion as Two Closely Interrelated Concepts***

Although the project was strictly defined and designed as a “*climate change adaptation*” project, it had a significant association with and strong implications for peacebuilding and social cohesion in the context of a region riven by community conflicts over water resources. Adaptation activities taking place at the level of communities, involving farmers and local authorities, closely interact with the power dynamics at the community level. The link between climate change and conflict is water, which in the Batken region is scarce and acts as a source of communal tension. Therefore, climate change adaptation does not take place in a vacuum – inter-ethnic and inter-community aspects are very important and will have to be taken into account. In the context of inter-communal conflict, the project’s contributions in the area of climate change adaptation are inseparable from its contributions in the area of conflict mitigation and resolution. Climate-resilient projects like this one, focused on water management, should be designed with a clear perspective on conflict-resolution in mind. It is precisely this focus on the conflict mitigation aspects of climate change adaptation that makes these initiatives more sustainable and efficient. Therefore, the design of the project would have been more effective if aspects of conflict mitigation and social cohesion had been included in the conceptualization and design of the project.

**Recommendations**

The evaluation also identified the following key recommendations for project stakeholders.

| **Recommendation** | **Responsible Entity** | **Timeframe** |
| --- | --- | --- |
| ***Recommendation 1: Completing Pending Activities***  As a first and urgent step, in the remainder of the project lifetime (till the end of September 2022), the Project Team and national stakeholders should complete all outstanding activities before the closure of the project. The project should focus on realizing full budget expenditure, as planned. Key priorities that require the project’s attention in the next few months are the following:   * Installation of the four weather stations. * Implementation of the activities related to the installation of the drip irrigation systems water intake equipment, and well development, funded through the expanded budget.   In the last Project Board meeting, project stakeholders should take note of all pending tasks and activities and make a decision on what is feasible to complete by the time of the project’s closure. Whatever activities will not be possible to complete by that time should be handed over for completion to the respective national authorities with a clear action plan that outlined the steps that are necessary for their completion. | **Project Team & Ministry of Agriculture & local level authorities and communities** | **Short-term** |
| ***Recommendation 2: Strengthen the sustainability of the project by further institutionalizing project achievements and promoting the dissemination of project approaches and technologies***  To strengthen the sustainability of project results, the project team and the national counterparts should focus in the last few months of the project more intensively on the way in which the results of the project will be disseminated in other locations and the way in which a possible replication of the project’s practices could occur.  In the remaining period of this project, the national partners should take a more proactive approach for the upscaling and replication of the adaptation project measures in other locations.   * The project team should develop a plan for the dissemination of project results. * A formal handover of all the knowledge and training materials produced under the project should be organized by the project team, identifying respective national counterparts who will be responsible for the receipt of the materials. * Then project’s last final report should be focused on documenting the major lessons learned from the project and outlining the main approaches piloted under the project that could be replicated elsewhere. | **Project Team and National Partners** | **Short and Medium-Term** |
| ***Recommendation 3: Integration of Conflict Mitigation Concerns into Climate-Resilient Interventions***  In future projects similar to this project, stakeholders should be careful to integrate conflict mitigation concerns into climate-resilient interventions.  In the future, UNDP should collect data on the effects of projects on conflict mitigation in the areas where project contributions occurred. This data may be used to inform future similar interventions by UNDP, GoK and development partners.  UNDP should follow the procedures that enable better integration of conflict mitigation concerns into projects that target environmental concerns that are directly related to the sources of conflict. UNDP should also strengthen links between the programme pillars, so that when projects within one pillar are designed, they can benefit from inputs from other pillars. | **Project Team and UNDP** | **Medium-Term** |
| ***Recommendation 4: Greater Focus on Gender Mainstreaming***  In future projects similar to the project, project stakeholders should include a dedicated gender expert in the design of the project. The involvement of a gender specialist in the project will contribute to a more effective mainstreaming of gender in the project and a more even distribution of responsibilities within the team, allowing other specialists to focus on other priority areas.  Similar projects targeting community development should collect and collate more effectively gender-disaggregated data at the level of indirect beneficiaries to guide and monitor project interventions.  Also, such projects should seek to assess project effects beyond direct beneficiaries, such as the number of individuals who benefit from the installation of drip irrigation systems, and counting how many of the land owners are female. Efforts should be made to measure/capture changes in power dynamics in the communities and the role of women in these communities, especially more broadly in decision-making.  Further, such projects could play a greater role in supporting the local governments in mainstreaming gender-disaggregated data into their adaptation planning processes. | **UNDP and National Government Partners** | **Future** |

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**ACRONYMS AND ABBREVIATIONS**

|  |  |
| --- | --- |
| ABD | Area-Based Development |
| ADB | Asian Development Bank |
| Aiyl Okrugs | AO |
| AWS | Automated Weather Stations |
| BWMA | Basin Water Management Administration |
| CPD | UNDP Country Programme |
| DAC | Development Assistance Committee |
| DIS | Drip Irrigation Systems |
| DRR | Disaster Risk Reduction |
| DWA | District Water Management Administration |
| EU | European Union |
| FAO | Food and Agriculture Organization |
| GCF | Green Climate Fund |
| GoK | Government of Kyrgyzstan |
| HACT | Harmonized Approach to Cash Transfers |
| IRH | Istanbul Regional Hub |
| LoA | Letter of Agreement |
| LSG | Local Self-Government |
| MAFILI | Ministry of Agriculture, Food Industry and Land Improvement |
| MAFILR | Ministry of Agriculture, Food Industry and Land Reclamation |
| MES | Ministry of Emergency Situations |
| MRV | Monitoring, Reporting and Verification |
| NAP | National Adaptation Plan |
| NDC | Nationally Determined Contribution |
| OECD | Organization for Economic Co-operation and Development |
| PB | Project Board |
| RR | Resident Representative |
| SDG | Sustainable Development Goal |
| TFD | Trust Fund for Development |
| ToC | Theory of Change |
| ToR | Terms of Reference |
| UNDAF | United Nations Development Assistance Framework |
| UNDP | United Nations Development Fund |
| UNDP CO | UNDP Country Office |
| UNFCCC | United Nations Framework Convention on Climate Change |
| USAID | United States Agency for International Development |
| WB | World Bank |
| WFP | Word Food Programme |
| WMO | World Meteorological Organization |
| WUA | Water User Associations |

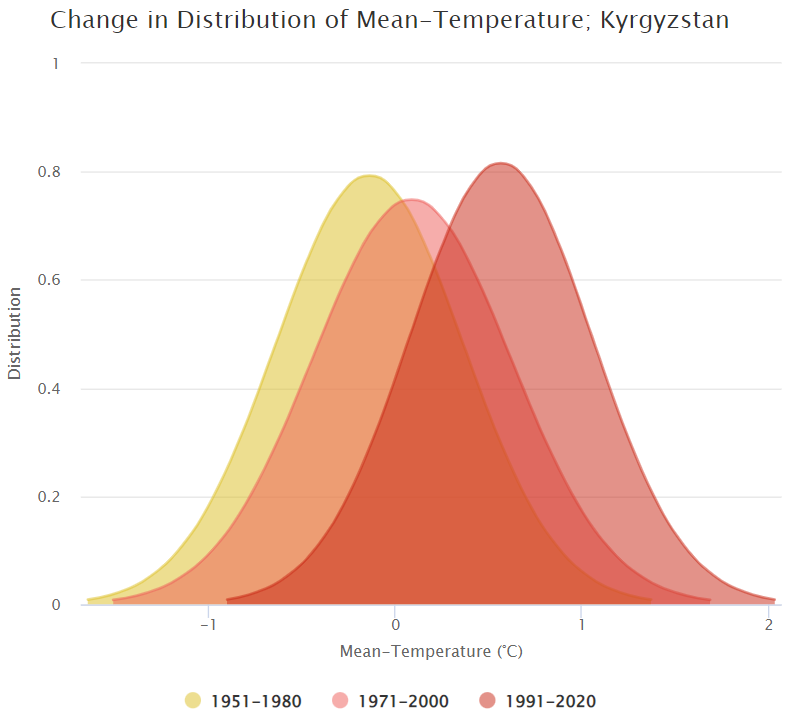
# INTRODUCTION

This introductory chapter provides a brief overview of the context in which the project was conceived and implemented and a short description of the project’s logic and expected results.

## Country Context

The Kyrgyz Republic is particularly vulnerable to climate change, the effects of which include glacial melting and higher risks of glacial lakes outflows, disrupting the water regime and disasters. Climate change is rapidly producing long lasting impacts on the planet, expected to increase in the future. Increasing temperatures are leading to more frequent and intense extreme events, such as droughts, unpredictable seasonal weather, and an increasing number of natural disasters such as landslides, mudflows, and avalanches. These events negatively impact lives and livelihoods while also negatively affecting the country’s key economic sectors, including agriculture, thus risking to deepen poverty. The country’s efforts had proven successful in reducing the poverty rate[[1]](#footnote-1) from 25.4% in 2016 to 20.1% in 2019, before having a considerable increase in 2020 to 25.3% due to the pandemic. The Batken region also faced the same trend, but the rates in this oblast are notably among the highest in the country, with a 37% poverty rate in 2016, to a 32.6% rate in 2019, jumping into a 34.7% poverty rate in 2020. This increase further showed the country’s vulnerability in times of crises.

Figure 1: Change in Distribution of Mean-Temperature in Kyrgyzstan

The implementation of climate change adaptation measures is an existing necessity for the Kyrgyz Republic, given its mountainous territory, sharp continental climate with cold winters and hot summers, its central and eastern regions being highly draught prone, which creates the perfect concoction for exposure and vulnerability to climate change impacts. Temperature trends are not very optimistic for the country, the mean annual temperature has increased these past decades, as the trends retrieved from World Bank data suggest and are depicted in Figure 1.

Notably, the Batken Province[[2]](#footnote-2) of the Kyrgyz Republic, located in the south-western part of the country, represents the most vulnerable area, according to the vulnerability assessment detailed within the Third National Communication of the Kyrgyz Republic under the UNFCCC[[3]](#footnote-3).

In 2022, the total population of Batken Province is estimated to be 558.6 thousand[[4]](#footnote-4), however, the contribution of Batken Province to Kyrgyzstan's total industrial production is less than 3 percent. On the other hand, agriculture and specifically crop production, is the province's main source of income, supplying products to the domestic market and for export, and has the potential to create more employment opportunities. Irrigated lands contribute more than 90 percent of crop yield. Water resources are particularly important in this regard to economic development, maintaining social stability, and food security. According to the same vulnerability assessment mentioned above, considering the worst-case scenario, the area of the province’s territory that may become unsuitable for agricultural use can go up to 54% (and even higher than that), out of which 17.65% where 19 local communities reside may turn into deserts.

The decentralized irrigation system in Kyrgyzstan is now maintained and operated by the Department of Water Resources and Melioration under MAFILR, and is actually managed on the ground by the communities’ self-organized Water Users Associations. The lack of sufficient technical information by the farmers makes this implementation flawed. Additionally, Batken falls behind on the World Meteorological Organization (WMO) recommendation which would suggest for 17 meteorological stations to be installed within the province, having only two weather stations. These factors combined with the frequent mudflows and other weather hazards, hinder the farmer’s ability to successfully continue working their lands.

## Project Description

The project “*Strengthening climate resilience of the Batken Province of the Kyrgyz Republic through introduction of climate smart irrigation and mudflow protection measures*” was funded by the Russian Federation and implemented by UNDP in the Kyrgyz Republic in cooperation with national partners, in accordance with the frame partnership agreement between UNDP and Russia.

The project was designed to strengthen the resilience of local communities in the Batken region, a region vulnerable to climate change impacts. The objective was designed to promote best practices in the area of “climate-smart” agriculture, and protection of water infrastructure against hydrological disasters. The project’s expected results are listed in the table below.

Table 1: Project Outcomes and Outputs

|  |
| --- |
| **Outcome 1:** Farmers and local communities receive reliable climate information tailored to their needs. |
| **Outcome 2:** Agricultural livelihoods are resilient to climate induced water shortages, and communities’ on-farm irrigation systems are resilient to climate related disasters. |
| **Outcome 3:** Local stakeholders in the region are aware about climate change resilience, best climate smart agriculture technologies and disaster risks reduction. |
| **Output 1:** Improved climate information and local capacity for climate-resilient irrigation water management. |
| **Output 2:** Expanded application of water-efficient technologies and protection of irrigation systems. |
| **Output 3:** Increased awareness and dissemination of best practices to reduce climate vulnerability of local communities. |

Based on the results of the vulnerability assessment of local communities, the project focused on seven municipalities in three districts of Batken region considered most vulnerable to climate change: Tort -Gul LSG and Samarkandek LSG of Batken district, Aksuu LSG and Kulundu LSG of Leilek district, Alga LSG, Markaz LSG and Orozbekov LSG of Kadamjai district.

The project was underpinned by a Theory of Change, detailed in the Project Document, briefly summarized in Table 2, and schematically depicted in Figure 2 (below).

Table 2: Project's Theory of Change

|  |
| --- |
| **Key problem** |
| * Well-being, food and water security and agricultural livelihoods of rural communities and farmers in the Batken region are highly vulnerable to adverse climate change impacts due to low adaptive capacity. |
| **Immediate causes** |
| * Lack of climate services and agrometeorological information; * Low agricultural crops production; * Big water loss within irrigation systems; * Growing damage of crops and irrigation systems from mudflows and floods; * Farmers’ communities and LSG unaware about the climate change trends, local vulnerability and adaptive opportunities. |
| **Underlying causes/root causes** |
| * Insufficient coverage of the region’s territory with the climate observation network and poor communication of the agrometeorological, phenological and hydrological forecasts to farmers communes and relevant stakeholders; * Lack of knowledge and good practices on water efficient irrigation technologies and climate smart agriculture (agro techniques, crops irrigation norms, etc.); * Degrading irrigation infrastructure not protected from hydrometeorological disasters * Low awareness of local stakeholders about climate change resilience, climate smart agriculture and disaster risks reduction. |

The expected project long term impact, as mentioned in the Project Document was formulated as: “*Increased resilience of well-being, food and water security and enhanced livelihoods of the most vulnerable people, communities and regions*”. Built on that, the objective is formulated as: “*Strengthening the climate resilience of livelihoods of local communities in the Batken Province, which is deemed to be a most vulnerable region to climate change impacts in the Kyrgyz Republic*”.

This was envisaged to be achieved through expansion of the regional climate observation net, comprehensive promotion and scaled up implementation of the best practices of water efficient irrigation and climate smart agriculture, and protection of irrigation water infrastructure from hydrometeorological disasters, as well as the awareness raising of the local stakeholders on climate resilience integrating all the previously said into communication campaigns.

The project was envisaged to finish by December 2020, but given the delays produced by the Covid-19 pandemic and cross-border conflicts over irrigation water distribution, an extension was made to the timeline of the project to be concluded by September 2022. The pandemic resulted in many halted activities and a delay to the implementation plans in 2020, while the Kyrgyz-Tajik cross-border conflict in April 2021 began over the Golovnoy water distribution point in the upper reaches of the Isfara River. The armed conflict became a reality for the population living close to the border, and the continuous support of the project became a necessity. As such, additional resources were required to support the local communities in their attempts to drill a well that would produce enough water to irrigate the existing 70 ha of land and an additional 50 ha. The benefits of such intervention would essentially be providing irrigation water supply to 25,000 people.

In terms of roles and responsibilities, a Project Board, chaired by the representatives from UNDP and co-chaired by nominated representative MES, MAFILI and State Administration of Batken Region serving as the Project Executive, will direct the project. The project board also consists of representatives from the Embassy of the Russian Federation in Kyrgyzstan, as well as representatives of country office. The project board may decide to expand its membership as appropriate.

Box 1: Overview of the Project Board

|  |
| --- |
| **Project Board:** The Project Board (PB) is responsible for making management decisions for the project, in particular when guidance is required by the Project Coordinator/CCA CTA. It plays a critical role in project monitoring and evaluations by assuring the quality of these processes and associated products, and by using evaluations for improving performance, accountability and learning. The PB ensures that required resources are committed. It will also arbitrate on any conflicts within the project and negotiate solutions to any problems with external bodies.  To ensure UNDP’s ultimate accountability for project results, PB decisions are made in accordance with standards that shall ensure management for development results, best value for money, fairness, integrity, transparency, and effective international competition. In case consensus cannot be reached within the PB, the final decision is rest with the UNDP.  Members of the PB consist of key national government and non-government agencies, and appropriate local level representatives. In addition, PB meetings are open to observer organizations, which can comment and provide input on project activities, and potential decisions, although only PB members will have decision-making powers. The PB will contain three distinct roles:  *Executive Role*: The UNDP RR/DRR serving as the Project Executive and chair the Project Board.  *Senior Supplier Role*: This requires the representation of the interests of the funding parties for specific cost sharing projects and/or technical expertise to the project. The Senior Supplier’s primary function within the PB is to provide guidance regarding the technical feasibility of the project. This role is rest with UNDP-Kyrgyzstan represented by the Resident Representative and Embassy of the Russian Federation.  *Senior Beneficiary Role*: This role requires representing the interests of those who ultimately benefit from the project. The Senior Beneficiary’s primary function within the PB will be to ensure the realization of project results from the perspective of project beneficiaries. This role will rest with the other institutions (key national governmental and non-governmental agencies, and appropriate local level representatives) represented on the PB, who are stakeholders in the project. |

Figure 2: Theory of Change Scheme

**Assumptions:** 1) Kyrgyzhydromet will agree upon the sites and land parcels for weather stations; 2) Kyrgyzhydromet will concluded agreements with the local stakeholders to assure operations and safety of the equipment; 3) Kyrgyzhydromet will engage adequate operators for new weather monitoring equipment; 4) Local partners will provide land parcels to install climate-monitoring equipment and support its operation and safety.

**Assumptions:** 1) Criteria for identification of sites for water-efficient irrigation technologies well accepted; 2) Selection of the technologies is done based on the cost benefit analysis; 3) Selection Commission includes all the relevant local stakeholders; 4) Farmers-beneficiaries assure duly operations and maintenance of the equipment; 5) Criteria for identification of sites for rehabilitation well accepted; 6) All constructed or rehabilitated facilities operational after the project.

**Assumptions**: 1) Local media and journalists & bloggers support the project; 2) Communication materials published and disseminated among stakeholders on regular basis; 3) Local TV Company do possess adequate capacities to develop and broadcast programmes.

*Activity Result 2.1. Identification of sites and locations for the introduction of water-efficient irrigation technologies in the target communities*.

*Activity Result 2.2. Introduction of water-efficient irrigation technologies.*

*Activity Result 2.3. Identification of sites for rehabilitation and protection of on-farm irrigation objects****.***

*Activity Result 2.4. Rehabilitation and protection of on-farm irrigation facilities*.

Output 2. Expanded application of water-efficient technologies and protection of irrigation systems.

Output 3: Increased awareness and dissemination of best practices to reduce climate vulnerability of local communities.

*Activity Result 3.1. Development of Project’s communication strategy, gender mainstreaming plan and information products.*

*Activity Result 3.2: Carrying out of information campaign “Province-District-Community” in Mass Media.*

Output 1. Improved climate information and local capacity for climate-resilient irrigation water management.

*Activity Result 1.3 Development and implementation of training programmes for LSG and WUA*

*Activity Result 1.4 Conduct of Climate related research on gender and food security*

*Activity Result 1.2 Development of improved climate information products.*

*Activity result 1.1. Expansion of an agro-meteorological observations network.*

**Project impact:** Increased resilience of well-being, food and water security and enhanced livelihoods of the most vulnerable people, communities and regions.

**Project objective:** Strengthening the climate resilience of livelihoods of local communities in the Batken Province, which is deemed to be a most vulnerable region to climate change impacts in the Kyrgyz Republic

Outcome1. Farmers and local communities receive reliable climate information tailored to their needs

Outcome 2. Agricultural livelihoods are resilient to climate induced water shortages, on- farm irrigation systems being resilient to climate-induced disasters.

Outcome 3. Local stakeholders and beneficiaries are aware about climate change resilience, climate smart agriculture and disaster risks reduction.

**Risks**:1) Insufficient coordination of project partners on the national and local levels; 2) Changes in the Government’s political vision with high change in the highest positions, and changes on the provincial, district and local levels; 3) Vested interests and distorted incentives, and petty corruption leading to resistance to innovations; 4) Natural disasters might hamper agricultural production,5) Exchange rate volatility.

# EVALUATION OBJECTIVES AND METHODOLOGY

This report presents the main findings of the terminal evaluation of the ‘*Strengthening climate resilience of the Batken Province of the Kyrgyz Republic through introduction of climate smart irrigation and mudflow protection measures.’* Project. The evaluation was commissioned by UNDP Kyrgyzstan and was carried out during the period June-August 2022 by an independent expert. This chapter provides an overview of the objectives of the evaluation and the methodology employed for the collection of information and the analysis of data.

## Purpose of the Evaluation

The evaluation’s goal was to assess the achievements of the Batken project and its results against what was expected to be achieved and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The evaluation covered the whole project period and its extensions (2019-2022) and includes all outputs and activities that were undertaken during the project period. It engaged all the project stakeholders. The evaluation also addresses how the project sought to mainstream gender, considered disability issues, and applied the rights-based approach. More specifically, the evaluation was conceived and conducted with the following specific objectives in mind:

* To assess and evaluate the progress made by the project towards the attainment of the results as specified in the project results framework / Annual work plans.
* To measure the contributions made by the project in enhancing the accountability, effectiveness, and efficiency of governmental staff capacity.
* To assess the relevance, coherence, sustainability, effectiveness, and efficiency of the project interventions.
* To identify challenges to project implementation and make recommendations on possible ways forward.
* To examine the cost efficiency and effectiveness of the project.
* To document main lessons learned, best practices and propose recommendations that will integrate Project Final Report.

The results of this terminal evaluation will be used primarily to:

* Support the decision-making of the project team, Government and UNDP CO management on: i) implementation modalities, and ii) strategic planning of activities in this area in the coming years.
* Provide UNDP with lessons from this particular project on overall project implementation and delivery, including potential corrective/adaptive measures that need to be applied to the design/implementation of other country programme interventions to enhance their effectiveness, efficiency, relevance and sustainability prospects.

## Evaluation’s Scope and Methodology

Key issues on which the evaluation focused were:

* Project design and its effectiveness in achieving stated objectives.
* Assessment of key financial aspects, including planned and realized budgets, financing, etc.
* The project’s effectiveness in building the capacity of local institutions and strengthening policy framework to encourage sustainable development.
* Strengths and weaknesses of project implementation, monitoring and adaptive management and sustainability of project outcomes including the project’s exit strategy.
* Recommendations, lessons learned, best practices that may be used further in the project or future interventions.

The evaluation used OECD DAC criteria and definitions[[5]](#footnote-5) and followed the norms and standards established by the United Nations Evaluation Group. It was guided by UNDP’s evaluation guidelines.[[6]](#footnote-6)

The methodology was based on mixed methods and involved commonly applied evaluation tools such as documentary review, interviews, information triangulation, analysis and synthesis. A participatory approach was taken for the collection of data, formulation of recommendations and identification of lessons learned.

Evaluation activities were organized according to the following stages: i) planning; ii) data collection; and, iii) data analysis and reporting. Figure 1 below shows the three stages and the main activities under each of them.

Figure 3: Evaluation Stages

Table 2 (below) further details the main activities that were undertaken by the evaluator under each stage.

Evaluation Planning

The planning and preparation phase included the development of the ToR by the UNDP team, and the design of the evaluation framework. The evaluator developed a detailed programmatic scope of evaluation activities as well as sample interview guides for interviews with stakeholders.

Table 3: Evaluation Steps

|  |
| --- |
|  |
| I. Planning   * Development of the ToR (by UNDP) * Start-up teleconference and finalization of the work plan * Collection and revision of project documents * Elaborated and submitted evaluation work plan |
| II. Data Collection   * Interviewed key stakeholders * Surveyed Innovation Advocates * Further collected project related documents * Debriefings and report summaries |
| III. Data analysis and reporting   * In-depth analysis and interpretation of data collected * Developed draft evaluation report * Circulated draft report with stakeholders * Integrated comments and submitted final report |

Data Collection

The data collection process involved a comprehensive desk review of project documents and semi-structured interviews with stakeholders and partners (see Table 3 for a list of data sources).

* ***Desk Review*** - The evaluator started by analyzing relevant documents, project documents and progress reports, annual work plans and meeting minutes, as well as national policies and strategies. Documents from similar and complementary initiatives, as well as reports on the specific context of the project formed part of the analysis.
* ***Semi-structured Interviews*** - In light of COVID-19 restrictions, a field mission was not possible for this evaluation, interviews were conducted remotely and care was taken to mitigate the limitations that distance introduces. Open-ended questions were used to enable interviewees to express their views freely and raise the issues they considered most important. A questionnaire was designed to guide the semi-structured interviews and ensure that questions would be investigated consistently across all interviews (the interview protocol can be found in Annex II). The list of people interviewed can be found in Annex IV.

Table 4: Data Sources

| **Evaluation tools** | **Sources of information** | |
| --- | --- | --- |
| Documentation review | General documentation | * UNDP Programme and Operations Policies and Procedures * UNDP Country Programme Document * UNDP Handbook for Monitoring and Evaluating for Results |
| Project documentation | * Project document (contribution agreement). * Theory of change and results framework. * Programme and project quality assurance reports. * Annual workplans. * Quarterly and annual reports. * Highlights of project board meetings. * Technical/financial monitoring reports. * The Evaluation will assess the key financial aspects of the project. The evaluator will receive assistance from the Country Office (CO) and Project Team to obtain financial data |
| Government documents/papers | * Including relevant policies, laws, strategies, etc. |
| Third-party reports | * Including those of local research institutes, etc. |
| Interviews with key project stakeholders | These include: | * Interviews with UNDP management and specialists * Interviews with national and local beneficiaries * Interviews with national level government institutions * Interviews with national level non-governmental institutions and private sector * Interviews with regional stakeholders |

Data Analysis

Information obtained through the documentary review and interviews was triangulated against available documented sources and was synthesized using analytical judgement. The method of triangulation is depicted in Figure 2 below.

Figure 4: Method of Triangulation



Figure 3 shows the steps that were taken for the analysis which was conducted on the basis of the standard criteria of relevance, coherence, effectiveness, efficiency, and sustainability.

* ***Relevance,*** covering the assessment of the extent to which outcomes were suited to national development priorities and organizational policies, including changes over time;
* ***Coherence,*** covering the assessment of the extent to which the projects activities and results are internally and externally coherent, including the alignment to government priorities and other interventions in the sector.
* ***Effectiveness,*** covering the assessment of the achievement of the immediate objectives (outputs) and the contribution to attaining the outcomes and the overall objective of the project; and an examination of any significant unexpected effects of the project;
* ***Efficiency,*** covering the assessment of the quality of project implementation; adequacy of financial management; efficient implementation;
* ***Sustainability,*** covering the likely ability of the intervention to continue to deliver benefits for an extended period of time after completion.
* ***Cross-cutting issues,*** covering the extent to which cross-cutting issues including gender equality and empowerment of women, and persons with disabilities we addressed in the design, implementation and monitoring of the project. All the data collection instruments were constructed to allow for the collection of disaggregated information by gender and other factors. Similarly, the data analysis process was organized to allow for the analysis of information from the perspective of gender and other vulnerability factors.

Figure 5: Steps in Analysis Process

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step 1.** Develop the results chain | **Step 2.** Assess the existing evidence on results | **Step 3.** Assess the alternative explanations | **Step 4.** Assemble the performance story | **Step 5**  Seek out the additional evidence | **Step 6** Revise and strengthen the performance story |

The analysis also covered aspects of project formulation, including the extent of stakeholder participation during project formulation; design for sustainability; linkages between project and other interventions; adequacy of management arrangements, etc.

## Evaluation Limitations

All possible efforts were made to minimize limitations that emerged in the evaluation process. Where limitations and constraints were met in the course of the data collection and analysis work, they are properly documented and reported in this report. A major limitation identified since the beginning of this evaluation was the inability of the evaluator to conduct a country mission and have in-person interviews with key stakeholders due to Covid-19 restrictions. To mitigate this limitation, the evaluator made use of a detailed questionnaires and conducted in depth interviews with stakeholders using online platforms such as MS Teams or Zoom.

## Structure of the Report

The report begins with an introductory section that provides a description of the project and the country context (previous chapter). The second (current) chapter provides an overview of the evaluation objectives and methodology. The third chapter presents the main findings of the report organized in the following standard dimensions: i) Relevance; ii) Coherence; iii) Effectiveness; iv) Impact; v) Efficiency; vi) Sustainability; and, vii) Cross-Cutting Themes. The fourth chapter identifies key “lessons learned” drawn from the experience of this project. The fifth section summarizes the main conclusions and the last (sixth) chapter provides a set of recommendations for the consideration of project stakeholders. Additional information supporting the arguments made throughout the document is provided in the annexes attached to this report.

# FINDINGS

While the amount of information generated by this evaluation was large, the findings presented in this chapter cover only the most essential aspects of the project and are to some extent focused on those issues and lessons that provide a better understanding of the achievements of the project and which would benefit the project stakeholders the most in similar future endeavors. The findings of this evaluation are organized in the following sections:

## Relevance

This section provides an assessment of the relevance of the project. While there may be several criteria for assessing relevance, in this case it is assessed along the following dimensions: i) relevance to the country’s needs and priorities; ii) relevance to community needs and priorities; (iii) relevance to the country’s achievement of SDGs; and, (iv) relevance to *UN Country Priorities* and UNDP’s *Country Mandate and Strategy*.

***Relevance to the Country’s Needs and Priorities***

The project was both guided by, and helped improve, the country's national priorities and policies in the area of climate change adaptation. As such, it has been highly relevant. The project has been part of the efforts of the Kyrgyz Republic to adapt its economy and agriculture to climate change impacts. The Kyrgyz Republic has developed and operates a number of national strategic documents that define the country's development policy for both the long term (up to 2040) and the medium term. Each of these documents identifies in varying degrees the priority of adaptation to climate change. The table below shows the country’s main strategic documents that are relevant to climate change adaptation. The project has been aligned with all the key documents.

Table 5: Strategic Documents relevant to Climate Change Adaptation

| **No.** | **Title, reference on official source** | **Legal document** | **Status** |
| --- | --- | --- | --- |
|  | National Development Strategy of the Kyrgyz Republic for 2018-2040[[7]](#footnote-7) | GD #221 from 31 October 2018 year | Effective |
|  | National Development Program of the Kyrgyz Republic until 2026[[8]](#footnote-8) | GD #435 from 12 October 2021 year | Effective |
|  | Action Plan of the Cabinet of Ministers of the Kyrgyz Republic for the implementation of the National Development Program of the Kyrgyz Republic until 2026 | DCM KR #352 from 25 December 2021 year | Effective |
|  | The concept of regional policy of the Kyrgyz Republic for the period 2018-2022[[9]](#footnote-9) | GD KR from 31 March 2017 year #194 | Effective, initiated the new stage formulation |
|  | State Program for the Development of Irrigation of the Kyrgyz Republic for 2017-2026[[10]](#footnote-10) | GD KR from 21 July 2017 year #440 | Effective, integrated into NDC (see below in NDC water resource’s part) |
|  | The concept of comprehensive protection of the population and territory of the Kyrgyz Republic from emergencies for 2018-2030 [[11]](#footnote-11) | GD KR from 29 January 2018 year #58 | Effective, integrated components on adaptation to climate change |
|  | Plan for the Development, Use and Protection of Water Resources in the Karadarya-Syrdarya-Amudarya Basin | Approved by decision of basin board | Effective, integrated the part on adaptation to climate change |

The following box provides a summary of the key strategic documents adopted by the Government of Kyrgyzstan (GoK) in the area of climate change adaptation.

Box 2: Key Strategic Documents adopted by the Government of Kyrgyzstan

|  |
| --- |
| The **“National Development Strategy of the Kyrgyz Republic for 2018-2040"** defines the strategic directions for the development of Kyrgyzstan for the long-term period.[[12]](#footnote-12) The priority "*Environment, Adaptation to Climate Change and Disaster Risk Reduction*" in section "3.2 Creating a Sustainable Environment for Development" addresses issues of adaptation to climate change. This section notes that "*the basis for improved environmental (note: and climate) performance will be improved environmental data management to inform the formulation and implementation of development plans, as well as environmentally sensitive decision-making*.”  **The National Development Program of the Kyrgyz Republic until 2026** was developed and approved as part of the National Development Strategy of the Kyrgyz Republic until 2040, while maintaining the principle of continuity based on the long-term strategic goals of the country's development with a focus on people and an emphasis on the fundamental obligation “not to leave no one behind” of the Sustainable Development Goals. Climate change issues are reflected in the Special Development Priorities - subsection "Environmental Sustainability and Climate Change". Specific measures are not spelled out, but in this section, it is noted that:   * addressing disaster risk reduction in a changing climate should be comprehensive, taking into account future threats and hazards, development of new forecasting and response methods; * it is necessary to develop monitoring, which will be based on national climate statistics and implementation of the national MRV system (monitoring, reporting and verification).   The Cabinet of Ministers of the Kyrgyz Republic developed an action plan to implement the programme.  **The “Action Plan of the Cabinet of Ministers of the Kyrgyz Republic for the implementation of the National Development Program of the Kyrgyz Republic until 2026**” was developed and approved in order to implement the National Development Program of the Kyrgyz Republic until 2026. The Decree of the Cabinet of Ministers of the Kyrgyz Republic, which approved it, established the responsibility of the heads of state executive bodies, authorized representatives of the President of the Kyrgyz Republic in the regions and heads of local governments (as agreed) for the quality and timely implementation of the Plan. This has been the most relevant GoK’s strategic document related to climate change. Area 7.2 is directly devoted to climate change issues. “Environmental Sustainability and Climate Change” of Priority VII “Special Development Priorities”. Adaptation to climate change is dedicated to 4 tasks:   * Increasing resilience and ability to adapt to dangerous climatic events and natural disasters; * Integration of climate change response measures into policies, strategies and planning at the national level; * Improved awareness, dissemination of information, education on climate change mitigation, adaptation and early warning; * Implementation of projects funded by partners in the field of disaster risk reduction.   The Action Plan includes the development and approval of the National Adaptation Plan (NAP). It is envisaged that the NAP will be approved by the fourth quarter of 2023 and is expected to replace the "Priority areas for adaptation to climate change by 2017".[[13]](#footnote-13)  Adaptation to climate change is also reflected in other policy priorities, such as directions 3.3. "**Land reform**" and 3.4. "**Clean drinking water**" of priority "III. Creation of environment for development". In particular, it is provided for:   * development of unproductive lands through modernization, rehabilitation and reconstruction of irrigation facilities; * improvement of the state of irrigation facilities.   The **Regional Policy Concept of the Kyrgyz Republic for the period 2018-2022** was designed to form a basic framework for the preparation of detailed programs for the development of regions and settlements in the medium term and in the long term. The main goal of the regional policy was to ensure the regions’ accelerated socio-economic development in order to improve the well-being and quality of life of the population. In the document, among key problems of regional development, high vulnerability to emergency situations is noted, and a special principle of territorial development is prescribed - "Transition to development planning, taking into account the mandatory inclusion of measures for prevention of emergencies".  "**Priority areas for adaptation to climate change in the Kyrgyz Republic until 2017**" is another conceptual document establishing a national policy to mobilize resources to minimize the negative risks and use the potential of climate change for sustainable development of the Kyrgyz Republic, through the implementation of adaptation measures in the most vulnerable sectors of the economy to climate change:   * water resources; * agriculture; * energy sector; * emergency situations; * health care; * forests and biodiversity.   In addition to the vulnerable sectors of the economy, the document prescribes an intersectoral priority area "Information, education and scientific capacity. Despite the fact that the planning horizon of this strategic document was set until 2017, it has not been cancelled. The document defines the conceptual framework for adaptation activities in the Kyrgyz Republic, and is the first document in which the most vulnerable sectors of the economy were approved.  The Kyrgyz Republic ratified the **Paris Agreement to the UNFCCC** in 2019. However, the country's approaches and positions were outlined in the proposed Nationally Determined Contribution (NDC) to the Paris Agreement to the UNFCCC, prepared back in 2015. In 2021, Kyrgyzstan submitted an updated NDC to the UNFCCC Secretariat. This document was approved by the decision of the Coordinating Council on Climate Change, Ecology and Development of Green Economy headed by the Chairman of the Cabinet of Ministers of the Kyrgyz Republic. The implementation plan for the updated NDC contained a list of adaptation measures and covered the six most vulnerable sectors:   * water resources; * agriculture * energy; * climatic emergencies; * public health; * forest and biodiversity.   The Implementation Plan of the updated 2021 NDC of the Kyrgyz Republic on adaptation to climate change in the "Water Resources" sector included 12 actions on five adaptation measures and an expert assessment of the required resources for these actions in the amount of 1,977.65 million USD. This is the most resource-intensive sector in the document. It is expected that as a result of the implementation of envisaged adaptation measures, science-based policy of water resources management in conditions of climate change will be formed, climate sustainability of irrigation infrastructure and drinking water supply systems will be improved. Thus, 53021 ha of new irrigated land will be introduced, 43385 ha of water availability will be improved and 44000 ha of irrigated land will be ameliorated. |

***Relevance to Community Needs and Priorities[[14]](#footnote-14)***

First of all, the project targeted the Batken region, considered the most vulnerable region to climate change impacts in the Kyrgyz Republic.[[15]](#footnote-15) Furthermore, within the Batken region, the project identified locations most vulnerable to climate change through a vulnerability assessment of local communities. Based on the assessment, the project focused on seven municipalities in three Batken region districts for pilot interventions (Batken, Kadamjai and Leilek).[[16]](#footnote-16) The assessment consisted of a comprehensive socio-economic analysis of the region – an analysis of local characteristics, problems, local comparative advantages and opportunities for development.

The vulnerability assessment was participatory – it involved local authorities, directors of Water User Associations (WUA), local farm households, etc. Furthermore, the National Union of WUAs conducted additional research in the pilot locations. Based on consultations with local communities, 60 plots were selected for the piloting of the installation of water-saving drip irrigation systems.[[17]](#footnote-17) The list of 60 beneficiaries selected and approved by the project selection committee was submitted for study to the expert on the development of technical specifications for drip irrigation systems. A technical assessment was carried out of the plots selected by local communities and, in accordance with the technical parameters, 40 sites were selected for installation of drip irrigation systems (DIS) in 2020, 22 sites in 2021, and 38 sites in 2022.

***Relevance to the Country’s Achievement of SDGs***

The project has contributed to GoK’s efforts in achieving related SDGs. The following are the SDGs to which the project has contributed directly.

* SDG2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
* SDG3: Ensure healthy lives and promote well-being for all at all ages.
* SDG5: Achieve gender equality and empower all women and girls.
* SDG6: Ensure availability and sustainable management of water and sanitation for all.
* SDG7: Ensure access to affordable, reliable, sustainable and modern energy for all.
* SDG11: Make cities and human settlements inclusive, safe, resilient and sustainable.
* SDG12: Ensure sustainable consumption and production patterns.
* SDG13: Take urgent action to combat climate change and its impacts.
* SDG15: Protect, restore and promote sustainable use of terrestrial ecosystems, halt and reverse land degradation and biodiversity loss.
* SDG17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

***Relevance to UN Country Priorities and the UNDP’s Country Mandate and Strategy***

The project was designed to fully align with, and contribute to the UNDAF Priority III: *“Environment, climate change, and disaster risk management*”; and Outcome 3: “*By 2022, communities and institutions are more resilient to climate and disaster risks and are engaged in sustainable and inclusive natural resource management and risk-informed development.*”

Furthermore, the project has contributed to the following two UNDAF outputs:

* Output 3.1. Policy, legal and institutional systems enhanced to apply innovative climate change mitigation and adaptation practices across the country.
* Output 3.3. Innovative and smart solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste, for better livelihoods and employment, with focus on women and youth.

The UNDAF Outcome 3 (above) is a shared outcome of the *UNDP Country Programme* (CPD) for the period 2018-2022. This document includes the following three outputs that relate to climate change:

* 3.1. Presence of approved, funded policy/strategy/plan for adaptation to adverse impacts of climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production.
* Degree of integrated water resource management implementation (scale 0-100).
* 3.5. Proportion of local administrative units with established, operational policies and procedures for participation of local communities in water and sanitation management.

Through its focus on climate-resilient interventions, the project clearly contributes to the achievement of these CPD outputs.

## Coherence

This section provides an assessment of the coherence with which the project has been designed, planned and implemented.

Coherence of Design

The project’s design is largely coherent. A positive factor for the development of the project was UNDP’s extensive experience with local development, environmental protection, climate change adaptation and disaster risk management in the Republic of Kyrgyzstan. In particular, the development of the project was informed by the UNDP’s “*Area-Based Development Programme*” in Batken, Osh and Naryn, as well as the Feasibility Study conducted by UNDP for its Funding Proposal to GCF. Furthermore, the design of the project was highly participatory, engaging a wide range of relevant stakeholders, including local authorities, development agents and vulnerable groups at the provincial, district and community level.

One project activity that was not clearly defined in the project document was “*Activity Result 1.2.: Improved climate information products communicated to farmers’ communes*”. The project document did not specify which information products had to be produced and how. The main reason for this challenge was that the project designers had not consulted Kyrgyzhydromet on the information products that were already available from them. Thus, the project team had to spend time to discuss and identify the availability of agroclimatic data and information with Kyrgyzhydromet, Ministry of Agriculture and National Statistical Committee.

Coherence with Other UNDP Projects

The project was implemented by UNDP under its “*Environment, climate change, and disaster risk management*” pillar, with support from its Batken Area-Based Development (ABD) Office which is in charge of programme execution at the local level. The involvement of the ABD office in the implementation of the project at the local level has ensured the coherence of the project with UNDP’s extensive experience in the ABD area – especially, in the Batken region.

The project has benefited from support by UNDP’s Istanbul Regional Hub (IRH). IRH’s Partnership Team (which also manages the partnership with the Russian Federation) has provided oversight and monitoring support for project implementation. The IRH team has participated regularly in Project Board meetings. The project has also received support from IRH’s teams of technical advisers responsible for water and disaster risk management.

While the project has been managed under UNDP’s “*Environment, climate change, and disaster risk management*” pillar, which contains other projects with which the project team has interacted through the various joint pillar activities, there is limited evidence of direct engagement and joint activities with other UNDP projects – be they in the area of climate change or disaster risk management. For example, one project with which the project in question could have interacted more closely through joint activities is the UNDP project titled “*Strengthening Integrated Risk Governance Capacities of the Kyrgyz Republic and Regional Cooperation in Central Asia*”, which started its activities in 2017. The goal of the project was to strengthen the capacity of the Kyrgyz Republic for integrated disaster risk management, as well as regional cooperation with Central Asian countries in this area.

The project is expected to inform an upcoming project funded by the Green Climate Fund titled “*Advancing development of a National Adaptation Plan (NAP) process for medium and long-term adaptation planning and implementation in the Kyrgyz Republic*”, which will be piloted in the Batken region. The project is also expected to inform another upcoming UNDP project funded by the EU and titled “*Climate Change and Resilience in Central Asia*”, which will pilot water management practices in the Batken region.

Furthermore, the review of project-related documentation reveals that there has been no direct interaction of the project with other UNDP projects focused on conflict mitigation and social cohesion. This is a missed opportunity because the project could have channeled the expertise and contributions of other projects to integrate peacebuilding and social cohesion elements into its activities focused on water-management. Such integration would have created significant synergies and efficiencies between the two types of interventions.

Coherence with the Activities of Other UN Agencies

The project team has collaborated with the World Food Programme (WFP) and the Food and Agriculture Organization (FAO) on the implementation of project activities, which has strengthened the coherence of the project with the efforts of the UN system in Kyrgyzstan.

* The project collaborated with the WFP in the context of the on-farm irrigation rehabilitation work in the pilot municipalities. WFP contributed US$ 37,498 through its “Food for Work” programme by paying local community members in the form of food (flour and oil) for manual labour involved in the planting of trees and shrubs along the rehabilitated canals to strengthen their slopes and on-farm irrigation rehabilitation work in pilot municipalities. The project reported that 146 vulnerable families were covered by the WFP.
* FAO offered advisory support for the development and implementation of a multi-modular curriculum aimed at enhancing knowledge and skills related to adaptation to climate change, including weather observation and interpretation of agrometeorological forecasts, disaster risk reduction, and the promotion of "climate smart" agriculture and rational use of water resources for pilot local communities of Batken region.

Coherence with the Activities of Other Development Partners

The project has sought to establish partnerships with development partners implementing projects in the Batken region. Based on project records, the project team has provided updates to the Development Partners Coordination Council, especially the subgroup on environment, climate change and DRR. The main development partners (non-UN) the project has engaged with are the Russian Federation and the World Bank.

As the project was funded by the Russian Federation-UNDP Trust Fund,[[18]](#footnote-18) it has engaged closely with the Russian Embassy in Bishkek and the Trust Fund team in Moscow. The project has significantly benefitted from Russia’s expertise and best practices in the area of climate change adaptation and agriculture (Russia’s expertise engaged by the project is described in this report’s section on “Effectiveness”).[[19]](#footnote-19) In particular, Russia’s hydrometeorological agency (Roshydromet)[[20]](#footnote-20) has been a key partner in the development of agroclimatic products.

In consultation with farming communities and Kyrgyzhydromet, Roshydromet in cooperation with the “*All-Russian Research Institute of Agricultural Meteorology*” developed a comprehensive support programme for building the capacity of Kyrgyzhydromet staff in the development of agrometeorological products and agrometeorological forecasting. The support programme focused on the establishment of a system for collecting, processing, preparing and producing agrometeorological products, including information products for farmers based on the experience of Roshydromet. The following were the main areas of support.

* Adaptation and introduction of a dynamic-statistical method for forecasting rice yield in the regions of Batken, Osh and Djalal-Abad;
* Development of an information and forecasting system for operational agrometeorological services;
* Training Kyrgyzhydromet specialists on the use of agrometeorological dynamic-statistical forecasting methods and information-forecasting systems for informing farmers in target areas.[[21]](#footnote-21)

Furthermore, with the support of the Federal State Budget Body “Main Geophysical Observation named by Voieikov”, Kyrgyzhydromet developed the “*Agroclimatic Reference Book of the Batken Region*”.[[22]](#footnote-22) The reference book consists of four sections. It provides a detailed description of the agro-climatic resources of the Batken region, the agro-climatic conditions for the growth of the main crops and agro-climatic information for livestock. It includes a desk assessment of Kyrgyzhydromet’s capacity (availability of the necessary database, analysis tools, etc.).

The project also cooperated with the World Bank (WB) on the installation of the four weather stations.[[23]](#footnote-23) The project made use of a previous tender the WB had conducted on the procurement of weather stations and Kyrgyzhydromet and UNDP decided to expedite the procurement process and avoid standardization and certification challenges by using the WB procedure. Also, the software for the operation of the weather stations was provided by the WB project.

As stipulated in the project document, the project was also envisaged to cooperate with USAID[[24]](#footnote-24) and the Asian Development Bank (ADB).[[25]](#footnote-25) However, cooperation with these two organizations did not materialize. ADB did not undertake any interventions in the Batken region, whereas USAID did not respond to project team requests for engagement.

## Effectiveness

The following is a brief summary of the effectiveness of the project, focusing on the extent to which the project has been able to achieve the planned activities. The assessment provided in this section is organized according to the project’s outputs.

**Output 1: Improved climate information and local capacity for climate-resilient irrigation water management**

Under Output 1, the project’s main focus has been on providing support to Kyrgyzhydoromet for the purchase and installation of four automated weather stations (AWS). The procurement of the four weather stations took much longer than originally planned. Project stakeholders decided to use direct procurement based on specifications developed previously under a WB project, but those specifications turned out to be outdated as the market for such equipment evolves fast and more advanced technologies become available. Therefore, it was necessary to find a compromise with the national counterparts on the technical details of the equipment. This process took some time, and as of the time of this evaluation, the installation of the weather stations was not completed yet. The project has already issued the installation contract for CAE Ltd.[[26]](#footnote-26) and the four field site plots are ready for their installation. The project team expects the delivery and installation of the four weather stations to be completed by end of September 2022.

Another key component of the project’s work has been the organization of trainings for various project partners. The table below shows the main training events organized by the project and the number of participants for each event. As can be seen from the table, a total of 352 individuals have benefitted from the project’s training activities.

Table 6: List of Trainings Organized by the Project

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Trainings** | **Number of participants** | **Gender** |
| 1. | Multi-module training in three districts of Batken region on:   * The use of agrometeorological forecasts to reduce climate risks in agriculture; * Emergencies related to climate change, protection of population and irrigation infrastructure; * Special training module (with practical exercises on the demonstration field) of "smart irrigation" systems for the beneficiaries from the pilot communities of Batken region. | 314 | N/A |
| 2. | Training for specialists of Kyrgyzhydromet in September[[27]](#footnote-27) on the use of the introduced agrometeorological dynamic-statistical forecasting methods and information-forecasting system in their work. | 3 | F |
| 3. | Trainings conducted by Russia’s Federal State Budget Body “Main Geophysical Observation named after Voieikov”, conducted on “Agroclimatic reference book in Batken Province” for representatives of Kyrgyzhydromet.[[28]](#footnote-28) | 10 | F-9  M-1 |
| 4 | Video-course on DIS for future usage by Water Users Associations at the national level.[[29]](#footnote-29) | 25 | M |

The most prominent activity was the training of farmers in the pilot communities through a multi-modular curriculum aimed at enhancing knowledge and skills related to adaptation to climate change, including weather observation and interpretation of agrometeorological forecast, disaster risk reduction, and the promotion of climate smart agriculture and rational use of water resources. Farmers received additional training on climate smart irrigation, using training materials on the use of agroclimatic information, preparedness for various hydroclimatic events, effective approaches to irrigation in a low-humidity environment.

The project also supported the national counterparts with knowledge products. The following are the most important knowledge products developed under the project.

* The project supported the conduct of two studies.[[30]](#footnote-30) The first one titled "*Climate Change and Food Security: Case Studies in Batken Province*'' determined how climate change affects food security and agriculture and provided recommendations for appropriate actions to reduce the adverse impact of climate change on food security and agriculture in Batken region. The second titled “*Climate Change and Gender in Batken Province*" focused on the identification of barriers that prevent women in general, and women farmers in particular, from benefiting from innovative climate change adaptation measures. These studies were translated into the Kyrgyz language and were presented to local and national partners.
* With Roshydromet’s support, the project developed a dynamic-statistical method for forecasting rice yields not only in the Batken region, but also in the rice-producing Djalal-Abad and Osh regions.
* In cooperation with the district and regional departments of the Ministry of Emergency Situations and the Ministry of Agriculture, Forestry and Water Resources, the project supported a detailed analysis of disaster risks with specific indicators of identification of natural and anthropogenic hazards.
* The “*Agroclimatic reference book for the Batken Province*” was developed under the project to provide agrometeorological specialists and agricultural workers with agro-climatic materials necessary for their practical work. The reference book strengthens the capacity of Kyrgyzhydromet in carrying out calculations and interpretation of results for potential users, awareness-raising of key stakeholders to improve agro-climatic meteorological forecasting.[[31]](#footnote-31) The project edited and translated the reference book into the Kyrgyz language.

**Output 2: Expanded application of water-efficient technologies and protection of irrigation systems**

Installation of Drip Irrigation Systems in Farmlands

As noted previously in this report, based on consultations with local communities and the decision of the “Project Selection Committee”, the project selected for the period 202-2021 a total of 62 land plots for the installation of water-saving drip irrigation systems.[[32]](#footnote-32) From a range of potential water-saving irrigation technologies, a study by the National Assembly of WUAs recommended the use of drip irrigation technologies to reduce water consumption. The project hired a technical company (expert) for the implementation of the installation of “drip irrigation systems” (DIS). The company carried out a technical assessment for each selected plot and developed the technical specifications for the installation of the drip irrigation systems (the list of the 68 beneficiaries is included in Annex VI of this report). This work resulted in the installation of DIS technologies in 114 hectares of farming land in the following Aiyl Okrugs[[33]](#footnote-33) (AOs): Aksuu, Alga, Kulundu, Markaz, Orozbekov, Samarkandek and Tort Gul. A total of 68 farmers benefited from these activities – of whom 53 were men and 15 women. The volume of potential water savings in the rehabilitated plots was estimated by the project to be 420,568 cubic meters. The total cost of the activities was US$ 177,269, of which 38% has been the contribution of farmers and the remaining 62% the contribution of the project. The following table shows the volume of water savings by AO, as well as the contributions of each AO and the corresponding project investments.

Table 7: Volume of Water Savings by AOs and their Contributions 2020-2021

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of AO** | **Community Contribution (US$)** | **UNDP inputs (US$)** | **Estimated water savings (in m³) in rehabilitated plots** | **Area of improved water availability (in ha)** |
| **Aksuu** | 12 825 | 13 368 | 44 298 | 12,8 |
| **Alga** | 8 900 | 13 399 | 58 730 | 15 |
| **Kulundu** | 16 125 | 27 027 | 110 898 | 28,8 |
| **Markaz** | 9 250 | 15 373 | 60 333 | 12,9 |
| **Orozbekov** | 16 063 | 22 192 | 88 073 | 21 |
| **Samarkendek** | 8 562 | 10 575 | 32 194 | 11,8 |
| **Tort Gul** | 2 750 | 8 566 | 26 042 | 11,7 |
| **Total (for 2020-2021)** | **66,769** | **110,500** | **420,568** | **114** |

The experience of the project was well-received by the local communities. As a result, the Batken state administration and AOs requested the project for an extension of activities to cover additional farmland. The request was also motivated by the need for improved access to water following the April 2021 escalation of inter-ethnic conflict at the border between Kyrgyzstan and Tajikistan (more details on this are provided in the report’s section on Cross-cutting Themes). To accommodate this request, the project team submitted an application to the Steering Committee and the Russian Trust Fund for an increase in the budget and extension of project timelines, which was subsequently approved. This extension resulted in 38 additional initiatives, which are listed in Annex VI of this report. The implementation of these initiatives was still ongoing at the time of this evaluation. Despite the very compressed timelines involved in the completion of these activities, the project team expressed confidence in the completion of the installation of the DIS systems by the end of the project in September 2022. A more detailed analysis of outstanding activities is provided in the “Efficiency” section of this report.

A total of 38 farmers are expected to benefit from these additional activities – of whom 35 are males and 3 females. The volume of potential water savings in the rehabilitated plots is estimated by the project to be 270,136 cubic meters. The total cost of the activities is US$ 87,590, of which 25% is the farmers’ contribution and the remaining 75% is the project’s contribution. The following table shows the volume of water savings by AO, as well as the contributions of each AO and the corresponding project investments.

Table 8: Expected Volume of Water Savings by AOs and their Contributions 2021-2022

| **Name of AO** | **Community Contribution (US$)** | **UNDP inputs (US$)** | **Estimated water savings (in m³) in rehabilitated plots** | **Area of improved water availability (in ha)** |
| --- | --- | --- | --- | --- |
| **Alga** | 3,125 | 2934 | 19700 | 4 |
| **Kyrgyz Kishtak** | 2688 | 4644 | 21813 | 3,6 |
| **Margun** | 2750 | 6869 | 35965 | 7,5 |
| **Markaz** | 2250 | 17251 | 69021 | 14,48 |
| **Meria c.Batken** | 750 | 4296 | 17644 | 3,8 |
| **Meria c.Isfana** | 875 | 4165 | 15382 | 3,2 |
| **Orozbekov** | 3000 | 13969 | 47536 | 11,25 |
| **Samarkandek** | 2500 | 4195 | 19992 | 4 |
| **Toguz Bulak** | 4250 | 7079 | 23083 | 4,78 |
| **Total (for 2022)** | **22,188** | **65,402** | **270,136** | **56,61** |

Project Contributions for 2020-2021

* Area under Drip Irrigation Systems - 114 ha
* Water Savings - 420,568 cubic meters (per season)
* Number of Beneficiaries - 68 (53 Male and 15 Female)
* Contributions – Total: US$ 177,269 - US$ 110,500 by the Project (62%) and US$ 66,769 by the communities (38%).

Project Contributions for 2022

* Area under Drip Irrigation Systems - 57 ha
* Water Savings - 270,136 cubic meters (per season)
* Number of Beneficiaries - 38 (35 Male and 3 Female)
* Contributions – Total: US$ 87,590 -- US$ 65,402 by the Project (75%) and US$ 22,188 by the communities (25%).

Objects of on-farm irrigation systems were rehabilitated and protected

Based on the results of the vulnerability assessment of local communities, the project identified areas and irrigation infrastructure vulnerable to hydrological disasters in the Batken, Kadamjai, and Leilek districts. The project team signed agreements with seven municipalities most vulnerable to climate change in three districts[[34]](#footnote-34) for the restoration and protection of these facilities. The project concluded an agreement with the State Agency for Environmental Protection and Forestry on the strengthening of slopes of rehabilitated canals with trees and shrubs in the pilot municipalities.[[35]](#footnote-35) The AOs’ administration carried out the planting of seedlings and saplings based on the planting plan recommended by the forestry agency.

The project also supported the Ministry of Emergency Situations in the implementation of its programme on Special Preventive and Liquidation Measures – this involved the rehabilitation of the mudflow section in Zhayilmasay village through the installation of 210 gabions.

The total costs invested in the rehabilitation of irrigation systems and mudflow protection facilities were US$ 181,840, of which 4% was the contribution of WUAs, 13% the contribution of AOs, 64% the contribution of the project and 19% the contribution of WFP for the provision of food (fortified flour and fortified vegetable oil) to project participants from socially vulnerable groups.

Table 9: Costs of Investments in the Rehabilitation of Irrigation Systems and Mudflow Protection Facilities

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **AO** | **WUA (4%)** | **AO (13%)** | **UNDP (64%)** | **WFP Inputs**  **(19%)** (food) | **Estimated volume of saved water in m³ of the rehabilitated site** |
| **Aksuu** | $723.25 | $3 273.12 | $18 114.87 | $4 540 | 2 592 |
| **Alga** | $2 454.55 | $1 963.64 | $14 355.48 | $7 666 | 1,260 |
| **Kulundu** | $680.52 | $3 791.73 | $19 433.53 | $5 515 | 540 |
| **Markaz** | $438.14 | $5 873.86 | $17 387.13 | $2 690 | 1 151 |
| **Orozbekov** | $875.95 | $3 862.86 | $16 506.12 | $2 734 | 1 437 |
| **Samarkendek** | $1 949.09 | $2 512.99 | $13 832.05 | $9 998 | 144 |
| **Tort Gul** | $94.90 | $1 570.13 | $14 648.55 | $4 365 | 924 |
| **Total**  **$181 840.43** | **$7,216.39** | **$22,848.31** | **$114 277.73** | **$ 37,498** | **8,048** |

According to project estimations, the restoration and protection of these facilities have resulted in savings of about 8,000 cubic meters of irrigation water per season (contribution to SDG 6.4), increased water availability for about 6,500 hectares of irrigated land (contribution to SDG 13.1 and SDG 11.5), and protection of about 5,000 hectares of agricultural land from hydrological emergencies (contribution to SDG 13.1 and SDG 11.5). A total of 30,513 beneficiaries (14,841 men, 15,672 women) have benefited from the mudflow protection measures, as well as improved employment opportunities, access to water and land production resources, and markets at the local and regional levels.

A brief summary of the work on the rehabilitation of irrigation infrastructure is provided in the box below.

Box 3: Summary of the Work on the Rehabilitation of Irrigation Infrastructure

|  |
| --- |
| 1. **AKSUU AO - rehabilitation of the domestic Kyzyl-Baraz canal (WUA "Omur-Suu")**   The irrigation canal in the Ak Suu village is equipped, and it is functioning according to the M&E report of UNDP Consultant in 2021. 145 hectares of irrigated land, 350 households provided with uninterrupted seasonal irrigation water. 145 hectares of irrigated land are protected against the threat of turning soil into non-agricultural land. The vulnerability of the population and their sources of income to the dangers of mudflow and land degradation processes is reduced. There is a safe environment for sustainable development of residents of 350 households in the number of 1,765 people, of which 967 are women.  A close up of a rock mountain  Description automatically generated   1. **ALGA AO - rehabilitation of the domestic canal Nurgaziev (WUA "Alga Jar Koton").**   An overchute is rehabilitated and is functioning at the Zhany Chek site in connection with an irrigation canal according to M&E report of UNDP Consultant in 2021. Anti-mudflow measures carried out along the channel of the Nurgaziev canal in Alga village. On the rehabilitated plot of Zhany Chek in Alga village, over 200 hectares of agricultural land protected from mudflows, of which 38 hectares are gardens, 21 households - a total of 72 people, of which 33 are women. Also, there are 27 households in the leased plots that provided with uninterrupted seasonal irrigation water. On the rehabilitated plot of Zhany Chek in Alga village, over 200 hectares of irrigated land, or 48 households, protected from the threat of insufficient irrigation water during the growing season, soil disturbance and convention of land into non-agricultural land. The vulnerability of the population and its sources of income to the dangers of mudflow and land degradation processes has been reduced.  A close up of a barn  Description automatically generated   1. **KULUNDU AO - rehabilitation of the domestic canal Kulundu (WUA "Kulundu-Razzakov”).**   An overchute has been rehabilitated and is functioning at the Kushlug Sai site in connection with an irrigation canal according to M&E report of UNDP Consultant in 2021. Anti-mudflow measures have been carried out along the channel of the "Kulundu-Razzakov'' canal in Kulundu village. An overchute has been rehabilitated and is functioning at the Tamchi Sai site in connection with an irrigation canal. Anti-mudflow measures have been carried out along the channel of the "Kulundu-Razzakov'' canal in Razzakov village. On the rehabilitated plot of Kushlug Sai in Kulundu village, 100 houses, 25 hectares of irrigated land, 52 households and household plots are protected against mudflows with uninterrupted seasonal irrigation water. On the rehabilitated plot of Tamchi Sai in Razzakov and Ak Aryk village, over 500 hectares of irrigated land, or 1978 households with a total population of 8,860 people, of which 4,754 are women, are protected from the threat of insufficient irrigation water during the growing season, soil disturbance and convention of land into non-agricultural land. The vulnerability of the population and its sources of income to the dangers of mudflow and land degradation processes has been reduced.  A picture containing outdoor, grass, person, car  Description automatically generated   1. **MARKAZ AO - rehabilitation of the domestic canal R-15 (WUA "Kojo Kaiyr”).**   Overchutes have been rehabilitated and is functioning at the "R-15" canal according to M&E report of UNDP Consultant in 2021. Anti-mudflow measures carried out along the channel of the "R-15"' canal in Kok Talaa village. The monolithic channel of the R-15 canal was rehabilitated and the losses of irrigation water in Kok Taala village were reduced. In Kok Taala village, after the rehabilitation of the canal and anti-mudflow measures, 78 hectares of irrigated land were protected from mudflows, 35 households and household plots were provided with uninterrupted seasonal irrigation water, with a total population of 375 people, including 210 women. The vulnerability of the population and its sources of income to the dangers of mudflow and land degradation processes were reduced.  A picture containing outdoor, grass, photo, riding  Description automatically generated   1. **OROZBEKOV AO - rehabilitation of the domestic canal Kaiyndy (WUA "Okhna Kaiyndy”).**   Based on the results of the implementation of this activity and according to the M&E report of UNDP Consultant in 2021, anti-mudflow measures were carried out along the channel of the "Kayindy" canal in Oro Bashi and Sary Taala villages. The monolithic channel of the Kayindy canal was rehabilitated and the losses of irrigation water in Oro Bashi and Sary Taala villages were reduced. Oro Bashi and Sary Taala villages, after the rehabilitation of the canal and anti-mudflow measures, 2,050 hectares of irrigated land protected from mudflows, 210 households and household plots provided with uninterrupted seasonal irrigation water, with a total population of 10,500 people, including 5,370 women. The vulnerability of the population and its sources of income to the dangers of mudflow and land degradation processes is reduced.  A person riding a bike down a dirt road  Description automatically generated   1. **SAMARKANDEK AO - rehabilitation of 2 overchutes through the Kulan-Sai and Jaiylma-Sai channels (WUA "Tort-Gul tolkunu”).**   An overchute has been rehabilitated and is functioning in connection with an irrigation Ak Tatyr canal in Jany Bak village of Samarkandek AO according to M&E report of UNDP Consultant in 2021. 481 hectares of irrigated land are protected from mudflows, 1734 households and 189 hectares of gardens are provided with uninterrupted seasonal irrigation water. 481 hectares of irrigated land and 189 hectares of gardens are protected from the threat of soil disturbance into non-agricultural land use. The vulnerability of the population and its sources of income to the dangers of mudflow and land degradation processes has been reduced. There is a safe environment for sustainable development of residents in 1734 households in the number of 8338 people, including 4153 women.  A picture containing outdoor, grass, building, photo  Description automatically generated   1. **TORT GUL AO - rehabilitation of the domestic canal R-6 (WUA "Bavash”).**   An irrigation canal has been rehabilitated and is functioning at the junction of domestic road on the Chon Talaa plot in Chon Talaa village according to M&E report of UNDP Consultant in 2021. 100 hectares, 1790 households and 490 hectares of gardens provided with uninterrupted seasonal irrigation water. 100 hectares of irrigated land and 480 hectares of gardens are protected from the threat of soil disturbance into non-agricultural land use. The vulnerability of the population and its sources of income to the dangers of mudflow and land degradation processes is reduced. There is a safe environment for sustainable development of residents in 1790 households in the number of 7493 people, including 3790 women.  A picture containing outdoor, photo, side, track  Description automatically generated  During 2021, the planting of trees and seedlings as bio-engineering slopes stabilization were implemented by specialists of Tort Gul AO, Samarkandek AO, Ak Suu AO, and Kulundu AO, with a total area of 14.5 hectares, next to mudflow protection structures and along the rehabilitated canals, on the basis of the conclusion of the Maksutov Noman, chief forester of Uch Korgon forestry enterprise and activities were forecasted on Batken TV. These works were carried out in partnership with WFP.  Within the cost extension, activities identified two technologies as water intake construction in Kulundu AO and well development in Samarkandek AO (see Table 2) |

Project Contributions through the Rehabilitation of On-Farm Irrigation Systems

* 8,000 cubic meters of irrigation water per season (contribution to SDG 6.4).
* Increased water availability for 6,500 hectares of irrigated land (contribution to SDG 13.1 and SDG 11.5).
* Protection of 5,000 hectares of agricultural land from hydrological emergencies (contribution to SDG 13.1 and SDG 11.5).
* A total of 30,513 people (14,841 men, 15,672 women) have benefited from the mudflow protection measures, as well as improved employment opportunities, access to water and land production resources, and markets at the local and regional levels.

In cooperation with the district and regional departments of the Ministry of Emergency Situations, the project contributed to a high-quality, detailed analysis of disaster risks with specific indicators of identification of natural and anthropogenic hazards, including projects in the water resources management and environmental safety sectors. The most dangerous zones requiring urgent solutions were included in the emergency response plans of the territorial units of the Ministry of Emergency Situations of the pilot districts of the Batken region, which implies their mandatory implementation. The project also contributed to the development of mechanisms and tools to address the issues identified as a result of the study in pilot villages and focused more on the implementation of mudflow protection facilities.

**Output 3: Increased awareness and dissemination of best practices to reduce climate vulnerability of local communities**

Output 3 was focused on awareness-raising and dissemination of information, and as such it cut across the other two outputs.

To share the project’s experience with external audiences and to raise overall awareness about the importance, challenges and opportunities of addressing problems related to climate change, the project team developed a communication strategy. A media company was contracted to create professional video production services in three languages. The project used the official websites and social networks of UNDP and national partners to disseminate information. The box below shows the main elements of the project’s media engagement.

Box 4: Project’s Media Engagement

|  |
| --- |
| The media company produced the following videos:   * Video on rehabilitation of domestic channels, posted on UNDP’s website and other communication channels.[[36]](#footnote-36) * Video on drip irrigation posted on UNDP’s website.[[37]](#footnote-37) * Video on the role and importance of automatic weather stations - released and posted on the official website and other communication channels of UNDP.[[38]](#footnote-38)   The following materials were placed in the mass media:   * Bio-engineering slopes stabilization by tree planting forecasted on Batken TV.[[39]](#footnote-39) * Training courses in Batken and Kadamjai were covered in the news programs of Batken TV.[[40]](#footnote-40) * Presentation of the “*Agroclimatic reference book in Batken Province*”.   Based on the successful experience with trainings for farmers on climate smart irrigation in the Batken region and the implementation of drip irrigation systems, the project produced a video-course for future usage by Water Users Associations at the national level.[[41]](#footnote-41)  Also, the three research studies mentioned in the previous sections of the report were presented to a wide national audience in September 2021.[[42]](#footnote-42) |

## Impact

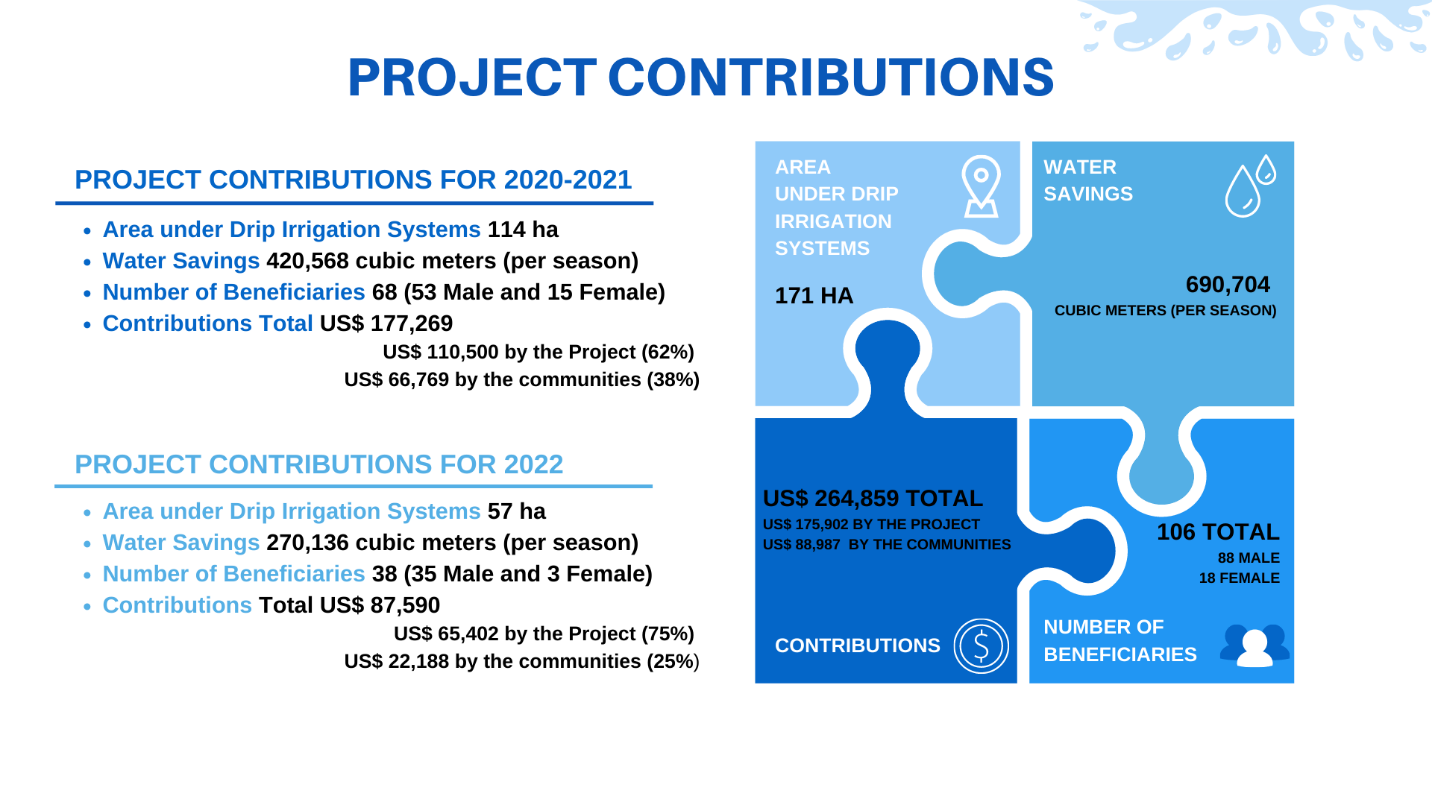
As far as the project’s impact is concerned, definite results at the outcome level are difficult to identify at this stage as the project is still underway and several activities have yet to be completed. The nature of investments in this project is such that they take time to turn into sustained improvements in living conditions for the local communities.

With regards to the project’s Output 1, activities on the installation of the four weather stations are still ongoing. Upon the completion of the installation process, the climate observation network will have expanded its coverage, making weather forecasts more reliable and precise. Before the project, the hydrometeorological observation density in the Batken region was 14.7% of the density recommended by the World Meteorological Organization (WMO). The installation of the four stations is expected to bring the density to the level of 60%.

The trainings listed in the previous section of the report have contributed to the strengthening of the capacities of the participants. This was confirmed by the participants of this evaluation who were generally satisfied with the quality of the training activities. Government technical staff, local self-governments, Water Users Associations, as well as Voluntary Rescue Teams, have improved their skills through the training provided by the project. One dimension that could have been more adequately organized by the project is the surveying of training participants at the end of training events on their level of satisfaction with the training material.

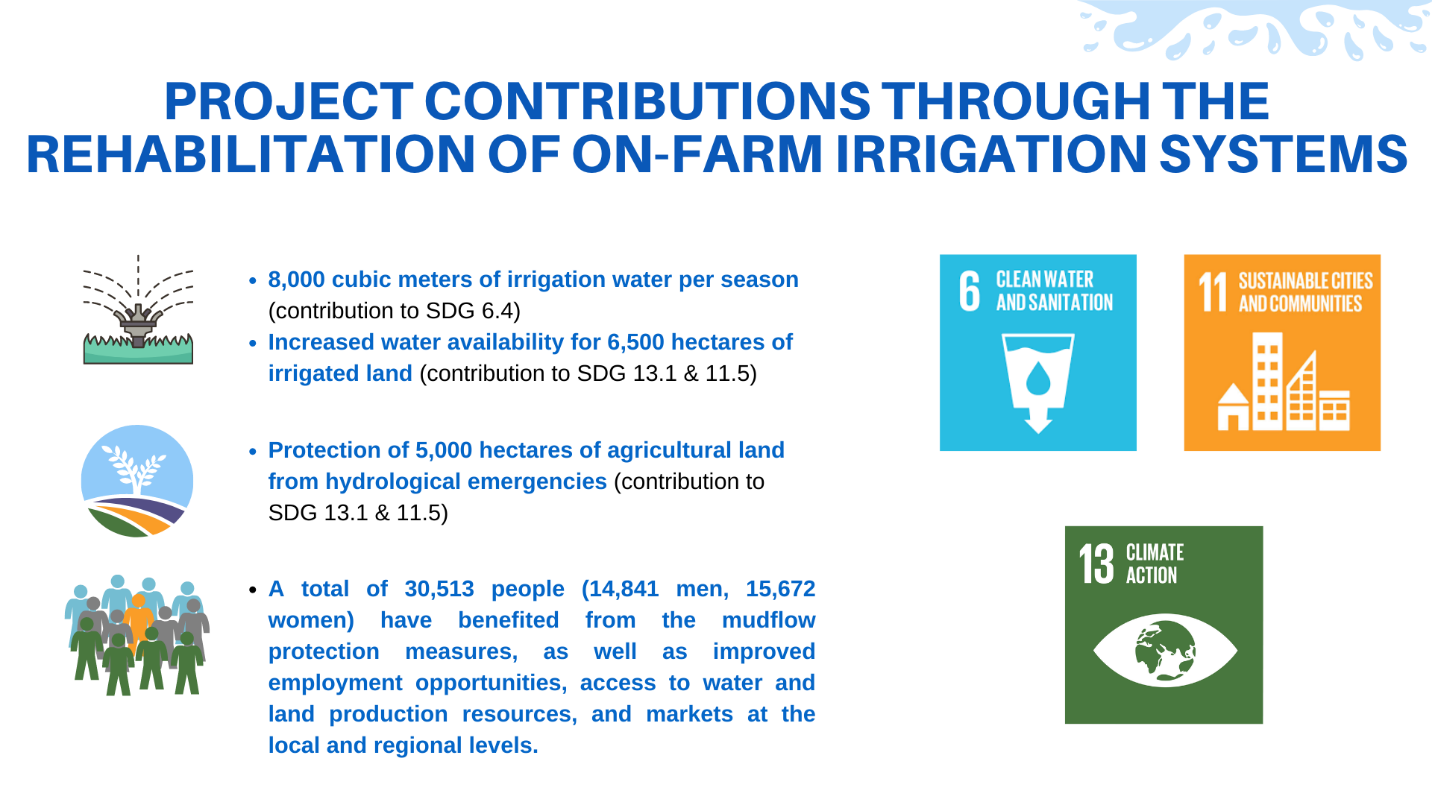
With regards to the project’s Output 2, the contributions of the project are clear. The following figure summarizes the contributions related to the installation of DIS systems.

Figure 6: Project Contributions Related to the Installation of DIS Systems



The following figure summarizes the contributions related to the rehabilitation of on-farm irrigation systems. Rehabilitated and protected irrigation facilities have been adapted to cope with mudflows and floods.

Figure 7: Project Contributions Related to the Rehabilitation of Irrigation Systems



As a result of the investments channeled by the project, the targeted communities in the Batken region have become more resilient to adverse impacts of climate change such as water scarcity, floods and mudflows.

Activities under the project’s Output 3 focused on awareness-raising and dissemination of information have sustained the achievements of outputs 1 and 2. Information about climate-smart agriculture practices and efficient irrigation systems has become widely available by the project.

## Efficiency

To assess efficiency, the report focuses on two aspects that are closely associated with efficient project management. These parameters are categorized into the following categories: (i) Expenditure and Budget Execution Rates; ii) Timeliness of Project Activities; and, iii) Resource Mobilization.

Project Expenditure and Budget Execution Rates

The project was implemented through the DIM modality, and as such UNDP has been responsible for the execution of all project activities based on UNDP rules and procedures. The table below shows the project’s budget execution by year and for the whole period. As can be seen from the table, the project has experienced low execution rates throughout its duration. At the point of this evaluation, the overall budget execution stood at about 60%. These execution rates are the result of a combination of implementation delays experienced by the project (the main delays will be further discussion the following section of the report) and the additional budget allocated by the donor for this project. The project team is confident that the total budget will be spent by the end of the project (September 2022), as most of the budget has already been contracted for the weather stations and the DIS activities funded through the cost extension.

Table 10: Project Expenditure

| **No.** | **Outcome Area** | **Budgeted (as per Pro Doc)** | **Spent** | **Execution Rate** |
| --- | --- | --- | --- | --- |
| **Year 2019** | | | | |
| **1** | Outcome 1 | 7,560 | 13,017 | 172% |
| **2** | Outcome 2 | 113,460 | 24,997 | 22% |
| **3** | Outcome 3 | 17,280 | 12,672 | 73% |
| **4** | Project Admin | 62,997 | 25,306 | 40% |
| **6** | **Total** | **201,298** | **75,991** | **38%** |
| **Year 2020** | | | | |
| **1** | Outcome 1 | 58,317 | 15,109 | 26% |
| **2** | Outcome 2 | 228,295 | 260,218 | 114% |
| **3** | Outcome 3 | 17,329 | 15,432 | 89% |
| **4** | Project Admin | 70,967 | 72,430 | 102% |
| **6** | **Total** | **374,907** | **363,188** | **97%** |
| **Year 2021** | | | | |
| **1** | Outcome 1 | 336,214 | 68,261 | 20% |
| **2** | Outcome 2 | 60,480 | 23,264 | 38% |
| **3** | Outcome 3 | 27,346 | 13,971 | 51% |
| **4** | Project Admin | 33,302 | 23,696 | 71% |
| **6** | **Total** | **457,342** | **129,192** | **28%** |
| **Year 2022 (January-March)** | | | | |
| **1** | Outcome 1 | 39,632 | 2,948 | 7% |
| **2** | Outcome 2 | 247,860 | 3,268 | 1% |
| **3** | Outcome 3 | 83,060 |  | 0% |
| **4** | Project Admin | 157,248 | 10,875 | 7% |
| **6** | **Total** | **527,800** | **17,092** | **3%** |
| **ALL YEARS** | | | | |
|  |  |  |  |  |
| **1** | Outcome 1 | 440,231 | 322,174 | 73% |
| **2** | Outcome 2 | 577,230 | 341,143 | 59% |
| **3** | Outcome 3 | 75,000 | 42,075 | 56% |
| **4** | Project Admin | 264,774 | 132,307 | 50% |
| **6** | Total | **1,357,235** | **837,699** | **62%** |

Timeliness of Project Activities

The project has operated under challenging circumstances. Three major external factors have had a significant impact on the pace of project activities.

* The COVID-19 measures had a significant impact on the project. Due to restrictions on the movement of people between regions, the implementation of project activities under all three components was delayed. The project tried to adapt to these challenges whenever possible. A key measure was the use of remote communication technologies. The project team was very proactive in this direction – it even supported the Batken Regional Administration with the installation of a conference call system to facilitate communications. Despite these efforts, the project experienced delays in the implementation of activities under the first and second components, which were associated with the installation of the four AMS, transfer of Russian expertise from Roshydromet, implementation of the training activities and the organization of field monitoring activities.[[43]](#footnote-43)
* Another major factor that affected the project was the institutional instability and political unrest that occurred in early 2021 following the announcement of the drafting of a new Constitution and plans to hold a constitutional referendum.[[44]](#footnote-44) The political and institutional instability that ensued had a delaying effect on the project, as the attention of the Government was distracted by the institutional crisis.
* The conflict that occurred in April 2021 on the border of Kyrgyzstan and Tajikistan affected significantly the implementation of project activities on the ground.[[45]](#footnote-45) The conflict emerged precisely in the Batken region and affected the locations which were targeted by the project. A more detailed discussion of the conflict dynamics is provided in the “Cross-cutting Themes” section of this report.

As a consequence of these factors, the project experienced a number of delays in the implementation of activities across all project components. These delays have also resulted from several challenges internal to the management of the project.

* For example, the recruitment of the project manager was slow and was completed only in October 2020, resulting in a significant delay in the implementation process.
* Also, the purchase of equipment for the meteorological stations took much longer than planned. While the project stakeholders were right in deciding to utilize direct procurement based on the equipment specifications developed by national partners with the World Bank, their specifications resulted outdated at the time of the tender, as the market for such equipment evolves fast and more advanced technologies become available. Therefore, it was necessary to find a compromise with the national counterparts on the technical details of the equipment. This process took time, and as of the time of this evaluation, the installation of the weather stations was not completed yet. The project team expects the delivery and installation of the four weather stations to be completed by end of September 2022.

As a result of the delays with project implementation, the project team has twice requested extensions of project implementation timelines. The first extension (to the end of the 3rd quarter of 2021) was granted by the Project Board in November 2020. The second extension was granted in September 2021. The second extension (until 30 September 2022) included a revised project schedule with an increased project budget provided by the Russian Federation in the amount of US$ 205,000 in 2022. The extension of the timelines was needed to complete the installation of the four weather stations (which is still ongoing). The rationale for the increased budget was the need to expand the drip irrigation systems approach to additional land plots (as described in the effectiveness section of this report). The additional funding by the Russian federation was allocated for activities in the Samarkandek village of the Batken region.[[46]](#footnote-46) The table below shows the list of activities submitted by the project team for additional funding in the amount of US$ 205,000 (and subsequently approved by the Project Board and the Russian Federation). About 50,000 local community members are envisaged to directly benefit from the project extension results.

Table 11: List of Activities proposed for Additional Funding

| **Activity** | **Estimated costs requested, USD** | **Current Status** | **Expected results** | **Beneficiaries** |
| --- | --- | --- | --- | --- |
| 1. Replicate the drip irrigation system in the Batken province | 75,000 | On-going  (Bidding process under finalization and by beginning of July contract will be issued) | Reducing water consumption on 60 hectares of orchards to 70% | Direct beneficiaries up to 100, and its redistribution for irrigation of other crops with a total of up to 6,000 people |
| 1. Procurement water intake equipment for the Kulundu LSG | 50,000 | On-going  (Bidding process under finalization and by beginning of July contract will be issued) | Improvement of permanent water supply to the machine canal during irrigation Kulundu AO from 2 cubic meters to 4 cubic meters | Total number of beneficiaries up to 25936 people; |
| 1. Develop a program to improve water supply to the population under conditions of increasing drought | 30,000 | On-going  (ToR were discussed with UNDP IRH). Bidding process will start at end of June | In addition to the UNDP study, Russian expertise will be used to develop the program and transferred to the OE (exit strategy). | It is envisaged that 400,000 people will benefit from future programme results |
| 1. The use of groundwater for irrigation of farms of the border Samarkendek LSG | 50,000 | LOA prepared and under signing by UNDP Senior Management (Harmonized approach for cash transfer) | Reduce border conflicts due to lack of irrigation water and increase water supply for irrigation | Total number of beneficiaries up to 25000 |

In the remainder the of the project lifetime (till the end of September 2022), the project team and national counterparts should focus their efforts on the completion of outstanding activities – especially, the installation of the four weather stations and the implementation of the above-listed activities funded through the expanded budget.

Resource Mobilization

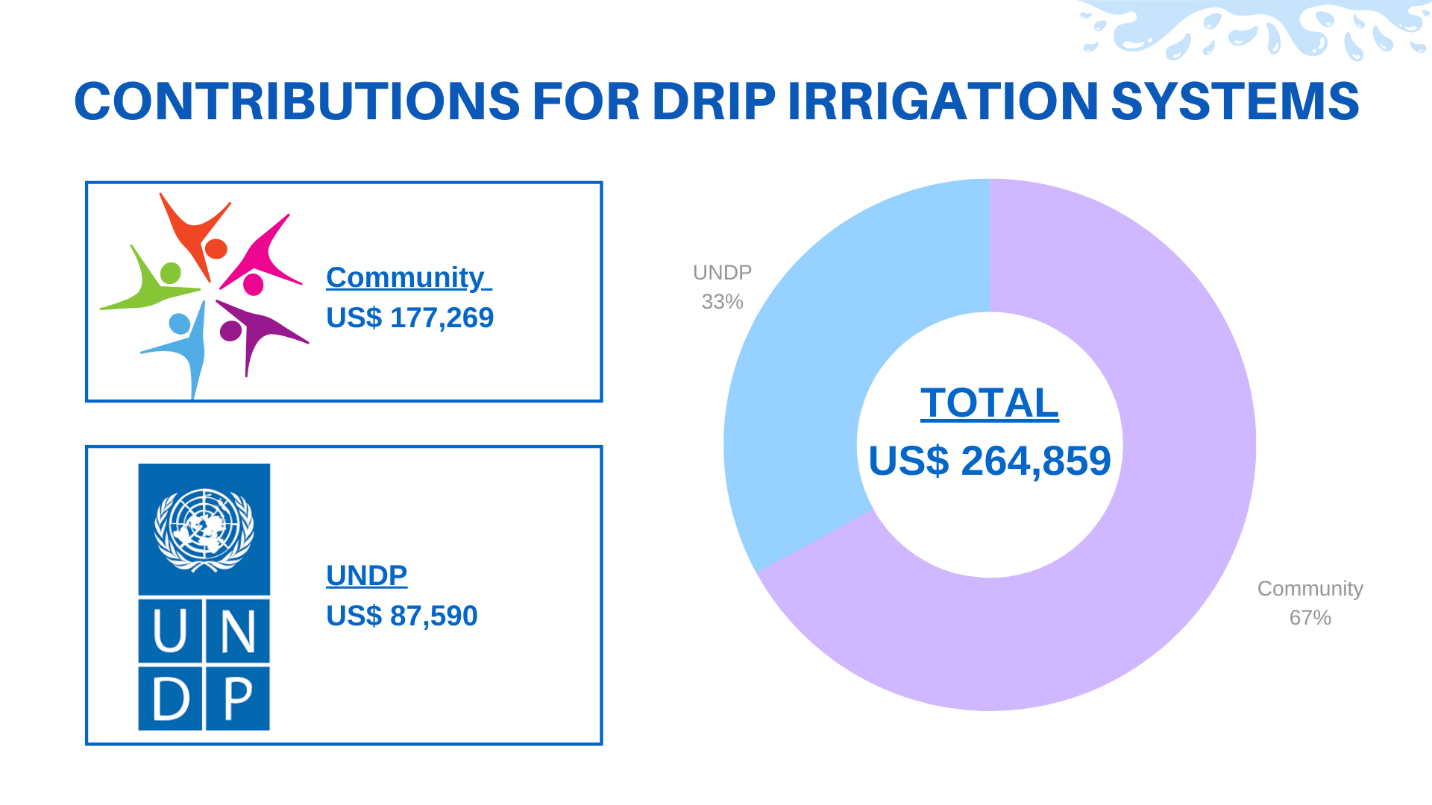
The project has been successful in mobilizing additional resources from a variety of sources. The table below shows that the project has generated US$ 1,430,000 in co-financing or parallel financing, which amounts to more than 60% of overall expenditure.

Table 12: Resource Mobilisation

| **Component Description** | **Requested Budget** | **Co-financing from UNDP and Governments (parallel)** |
| --- | --- | --- |
| **Component 1. Improved climate information and local capacity for climate-resilient irrigation water management.** | **$200 000** | **$120 000** |
| *Activity Result 1.1 Expansion of the network of agro-meteorological observations.* | $66 000 |  |
| *Activity Result 1.2 Development of improved climate information products.* | $63 000 |  |
| *Activity Result 1.3 Development and implementation of training programs for LSGs and WUAs.* | $45 000 |  |
| *Activity Result 1.4 Conduction of climatic researches.* | $23 000 |  |
| *MONITORING* | $3 000 |  |
| **Component 2. Expanded application of water-efficient technologies and protection of irrigation systems:** | **$442 000** | **$1 180 000** |
| *Activity Result 2.1. Identification of sites and locations for the introduction of water-efficient irrigation technologies in target communities.* | $23 500 |  |
| *Activity Result 2.2. Introduction of water-efficient irrigation technologies.* | $220 000 |  |
| *Activity Result 2.3. Identification of on-farm irrigation facilities for carrying out rehabilitation and protection measures.* | $18 000 |  |
| *Activity Result 2.4. Rehabilitation and protection of on-farm irrigation facilities.* | $177 500 |  |
| *MONITORING* | $3000 |  |
| **Component 3: Increased awareness and dissemination of best practices to reduce the climate vulnerability of local communities:** | **$69 000** | **$90 000** |
| *Activity Result 3.1. Development of the Project’s communication strategy, gender mainstreaming plan and information products.* | $28 000 |  |
| *Activity Result 3.2: Conduction of an information campaign "province-district-community" about project in the media.* | $39 000 |  |
| *Monitoring* | $2 000 |  |
| **Project Management, monitoring and evaluation** | **$117 000** | **$40 000** |
| **8% GMS** | **$72 000** |  |
| **TOTAL:** | **$900 000** | **$1 430 000** |
| **SUBTOTAL** | **$2 330 000** | |

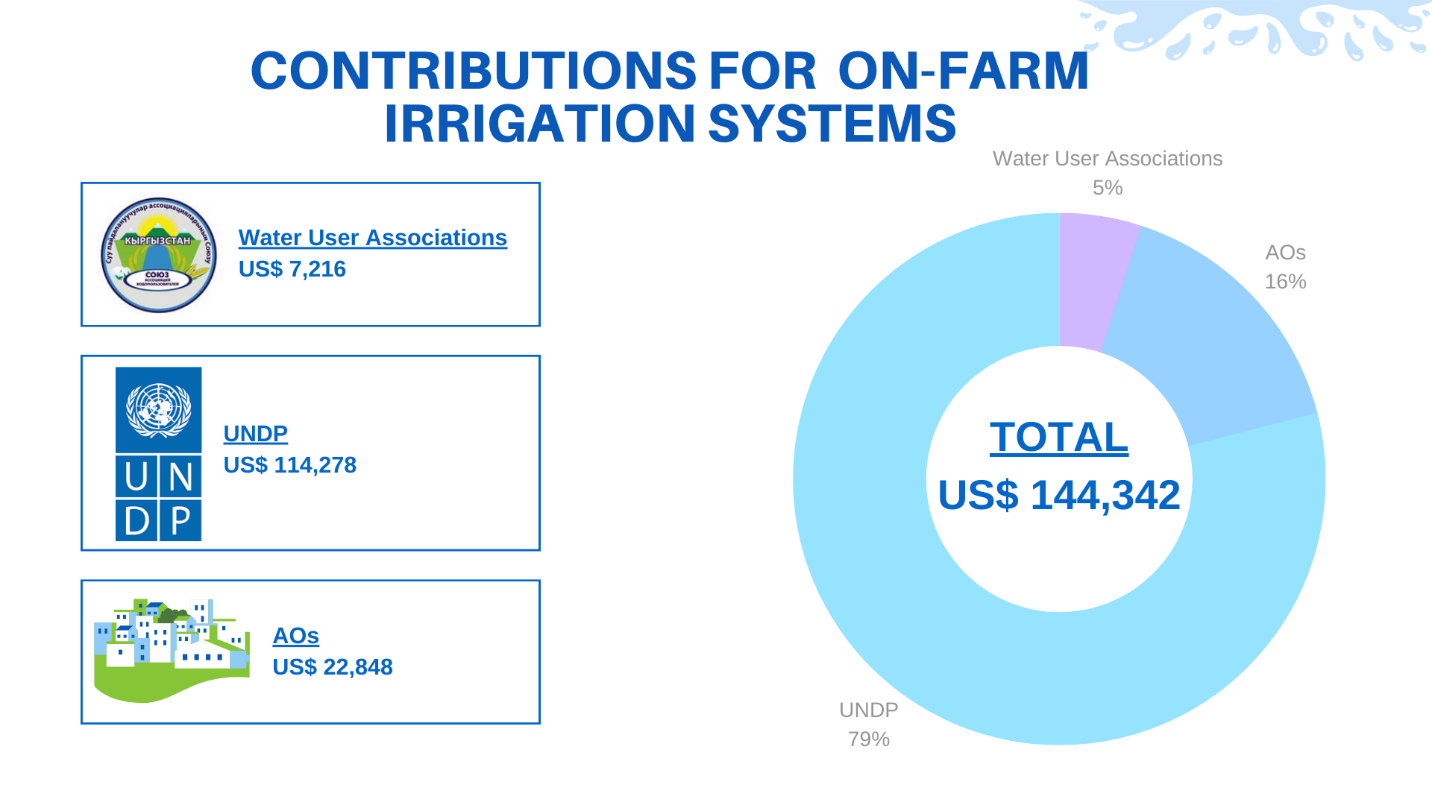
For the component targeting the “installation of drip irrigation systems”, communities (beneficiaries) contributed US$ 177,269 and UNDP US$ 87,590, amounting to US$ 264,859.

Figure 8: Contributions for Drip Irrigation Systems



For the component targeting “on-farm irrigation systems”, Water User Associations contributed US$ 7,216, the AOs US$ 22,848 and UNDP US$ 114,278, amounting to a total of US$ 144,342.

Figure 9: Contributions for On-Farm Irrigation Systems



Use of Good Practices

The project has made good use of international “good practices” in the area of water management and climate change adaptation. The use of these practices has resulted in efficiencies as the project did not have to “reinvent the wheel”. The project has engaged several experts from the Russian Federation who have shared best practices not only from Russia but also more broadly. The sharing of international practices with national counterparts has contributed to the development of national capacities in the respective areas. The box below summarizes the main international practices that were shared with Kyrgyz counterparts through this project.

Box 5: International Practices Promoted by the Project

|  |
| --- |
| * Based on the results of consultations with farming communities and Kyrgyzhydromet staff, the National Statistic Committee and the Ministry of Agriculture, Food Industry and Land Improvement, as part of the implementation of measures to improve climate information products transmitted to farming communities, a comprehensive work completed to build the capacity of Kyrgyzhydromet staff by leading research institutes of the All-Russian Research Institute of Agricultural Meteorology in the development of agrometeorological products and agrometeorological forecasting, focusing on the following main aspects: 1) adaptation and introduction of a dynamic-statistical method for forecasting the yield of rice of Batken, Osh and Djalal-Abad of Kyrgyzstan; 2) development of an information and forecasting system for operational agrometeorological services; 3) conducting training for specialists of Kyrgyzhydromet in September[[47]](#footnote-47) on the use of the introduced agrometeorological dynamic-statistical forecasting methods and information-forecasting system for informing farmers in target areas. * Kyrgyzhydromet with the support of an expert from the Federal State Budget Body “Main Geophisical Obsrevation named by Voieikov” presented the “Agroclimatic reference book in Batken Province”.[[48]](#footnote-48) The main purpose of the reference book is to provide agrometeorological specialists and agricultural workers with agro-climatic materials necessary for their practical work. The project edited and translated the reference book into Kyrgyz language and disseminate it on local and national levels during September 2021.[[49]](#footnote-49) * Two engineers developed specifications for a drip irrigation system (DIS) for installation in the Batken province. Based on this, the experts delivered a video-course on water saving irrigation technologies and DIS for future usage by Water Users Associations on a national level.[[50]](#footnote-50) The course was presented on a round table in the Batken province.[[51]](#footnote-51) * To put on agenda the proper monitoring and early warning system need to be provided by Kyrgyzhydromet for decisions makers on constant mode to increase resilience and capacity of (1) the irrigation system nets, their efficient operation and maintenance, and (2) the management of the water irrigation system of the province. In this regard, Kyrgyzhdydromet has a demand to build the capacity for timely forecasting and usage of modelling for climate change exposure and future projections. Therefore, the project recently issued the contract with an expert from State Hydrological Institute in Saint Petersburg (partially KM project contribution) who conducted a study on forecasting the climate change exposure on seasonal river run-off and water irrigation system as exemplary of Batken province and trained Kyrgyzhydromet staff. |

Overall, national counterparts interviewed for this evaluation were satisfied with the level of knowledge shared by the project on the basis of international practices.

## Sustainability

Sustainability is a flexible concept that may be assessed in various ways. The stakeholders engaged in this evaluation believe that most of the achievements of this project are likely to be sustained. The strong ownership of national counterparts and the project’s collaborative approach have promoted sustainability. This section will focus on two key factors of sustainability: i) national ownership and meaningful engagement of partners; and, ii) replicability of project achievements.

National Ownership

The project’s level of ownership by national partners has been strong. This is evident in the crucial role of the Project Board in the decision-making process. Under the leadership of the Ministry of Agriculture, Forestry and Water Resources, Ministry of Emergency Situation and State Administration of Batken region, the board has engaged other key members such as the Hydrometeorological Agency (also known as KyrgyzHydromet or Kyrgyzhydromet),[[52]](#footnote-52) a sub-ordinate structure of the Ministry of Emergency Situations, and the respective district administrations. The board has played a key role in providing strategic direction, facilitating coordination and exercising oversight of project activities. The selection of pilot AOs was done in consultation with experts from the Ministry of Emergency Situations and the Ministry of Agriculture, Forestry and Water Resources.

At the level of implementation, the project’s two main national partners at the central level have been the State Water Resources Agency under the Government of the Kyrgyz Republic[[53]](#footnote-53) and Kyrgyzhydromet. Both organizations have fully owned the respective components of project activities and have been close partners of the project team. To facilitate the implementation of the project, Kyrgyzhydromet even established a dedicated working group.[[54]](#footnote-54) Regular consultations and meetings between the project team, UNDP and the two national partners have taken place in the course of project implementation (at the time of COVID-19 restrictions this group convened online). Both institutions were fully involved in the selection of the meteorological sites for the installation of the four weather stations and the land plots to benefit from the improvements in DIS and irrigation systems.

At the sub-national level, the project has worked in close cooperation with the Batken Regional Administration, the respective district administrations (district departments for agrarian development), and the Local Self-Governments (LSGs) of the targeted communities. The provincial and district authorities were fully engaged in the strategic decisions required at the sub-national level for the implementation of the project.

The project also created the space for the engagement of local communities in project activities. Throughout the planning and design stages, the project conducted consultations with district administrations, AOs and communities on the design and installation of the DIS systems. Water User Associations (WUAs) and farmer households were involved in consultations on the identification of project priorities, as well as the vulnerability assessment.[[55]](#footnote-55) As noted previously in this report, the identification of target farm plots for the piloting of the installation of water-saving drip irrigation systems was done in consultation with local communities. The National Union of WUAs was engaged by the project in conducting research on the pilot locations.

Also, the implementation process was highly participatory. The construction of the mudflow protection structures involved the local departments of the Ministry of Emergency Situations of the Batken region, local departments of the Batken region of the Ministry of Agriculture - Basin Water Management Administration (BWMA), and District Water Management Administration (DWA). The project gave full ownership and responsibility to LSGs by engaging them directly as implementing partners for the relevant activities, using letters of agreement (LoAs) and the mechanism of Harmonized Approach to Cash Transfers (HACT) for the transfer of funds to them.[[56]](#footnote-56) The implementation of infrastructure projects at the local level was conducted by contractors hired by LSGs in accordance with the public procurement procedures under the legislation of the Kyrgyz Republic. UNDP, jointly with the local community, carried out the quality monitoring and oversight functions.

A crucial indication of ownership, and subsequently sustainability of these interventions, is the co-financing and parallel financing generated by the project. Financial resources were pooled from across the partners to fill the gaps, which in the end has increased the feeling of ownership over the results. Local communities provided co-financing for the installation of the DIS systems, whereas the seven AOs co-financed the reconstruction of the mudflow protection structures (the respective amounts of financing are provided in the “Effectiveness” section of this report).

The provincial and district authorities engaged with the project’s evaluation and expressed their satisfaction with the ownership of the project at the local level and its contributions to the local communities. As noted in the previous sections, the project even supported the provincial administration with communication infrastructure for the conduct of remote meetings.

Another important stakeholder that has played a crucial role in the project has been the private sector. All the design and installation work of the drip irrigation systems and the four automated weather stations was carried out by private sector firms.

Another sustainability factor related to the project is the set of knowledge products which have been handed over to the respective government entities. In particular, the two research studies on food security and gender in the Batken region provide specialists and agricultural workers with key agrometeorological information for their practical work.

Replication of Activities

The project was intended and designed to pilot and demonstrate technological and institutional solutions to climate change adaptation problems in the agriculture sector. One aspect of the project has been the promotion of irrigation and mudslide prevention technologies that are climate-resilient. To this end, the project has invested considerable resources in the dissemination of information.

The extent to which the solutions and technologies promoted by the project have been replicated is difficult to establish because the project is not completed yet and the replication effects take time to materialize.

There is evidence however of the attractiveness of the project’s approach and principles in the eyes of beneficiaries.

* First, this was confirmed by the evaluation participants who expressed satisfaction with the activities of the project and demanded greater support in this area. Interviewed community members have become increasingly interested in drip irrigation.
* Second, one of the reasons for the project’s request for a cost-extension was to allow it to scale up the positive experience of the implementation of activities and explore other options to improve access to water in order to mitigate disputes over water resources.
* Third, the WFP is interested in using the project’s experience and practice in an upcoming climate change adaptation project[[57]](#footnote-57) funded by the Green Climate Fund with a budget of US$ 10 million, which is envisaged to support Kyrgyzhydromet in the development of agrometeorology in three regions, including the Batken region.

There are some key factors of the project’s replicability that were identified by evaluation participants. They include the following:

* The project was able to identify farm plots for DIS interventions that it could afford to support. Therefore, there is already a list of additional farms that could potentially benefit from similar interventions if a new programme was in place. The project team has planned to present the list to the Government by end of June for possible use in the future.
* One criterion used for the selection of pilot communities was the interest, responsiveness and willingness of their authorities to participate in climate adaptation activities - including their willingness to share experiences with other communities.
* The provision of financial contributions for the installation of DIS systems by the local communities creates incentives for further investments by the communities themselves in this area.
* The project engaged LSGs as implementing partners.[[58]](#footnote-58) This cooperation modality has contributed to the development of their capacities in the implementation of donor-funded projects, as well as increased awareness and financial literacy. The LSGs are now better prepared to finance and implement similar projects in the future.
* The demonstration of innovative technologies was supported with hands-on training, field demonstrations and consultations. Training has been an important aspect of the project, which has contributed to the improvement of the capabilities of national stakeholders in managing similar projects on their own. The final conference and the publication of project materials planned by the project team for September will provide national and local stakeholders with additional information and lessons learned from this project that could be applied in the future.

While the adaptation technologies and measures promoted by the project have produced positive results, there is no consensus among stakeholders interviewed for this evaluation about their long-term impact. The key question is – to what extent these measures, technologies and approaches are going to be further adopted by authorities and communities in other locations. This is a process that takes time.

For all the positive examples provided in this report, there is a need for a more proactive approach and intensified efforts in promoting the upscaling and replication of the adaptation project measures in other communities. In the remainder of the project’s lifetime, the project team could take additional steps to scale up the project’s positive experience in the implementation of drip irrigation systems and the rehabilitation of irrigation systems, using project reports and agrometeorological systems to improve food security, as well as to consider options for additional provision and development of programmes of sufficient irrigation water supply to reduce the risks of conflicts over water resources and increase the resilience of local communities to climate change. A more effective dissemination of the experience of the project will require a clear dissemination plan, underpinned by specific actions and timelines, and the commitment of the Government to carry out this work. To this end, the project team could develop an action plan/strategy and concrete line of action that has the agreement of the government. The UNDP CO could provide further support in this area through future interventions. This is one of the key recommendations identified in the recommendations section of this report.

## Cross-cutting Themes

The two main cross-cutting themes examined in this dedicated section of the report are the theme of ***conflict resolution***, in light of its importance in the region of Batken, and the ***mainstreaming of gender***, another crucial feature of the project given the key role that women play in agriculture and the effect that agriculture activity has on the lifestyle of women in rural areas.

Mainstreaming of Conflict Resolution

The Batken region is located in the Feghana Valley, where Kyrgyzstan, Tajikistan, and Uzbekistan intersect. In this area, borders are often poorly demarcated and exclaves of differing ethnicities are common. Confrontations between residents in border areas of the Ferghana Valley are relatively common. They are often triggered by localized conflicts over water resources, which due to droughts are scarce in the region.

Batken region came to the center of public attention in April 2021, when a flare-up of the long-running conflict in the border areas of Kyrgyzstan and Tajikistan occurred. The conflict erupted in the target areas of the project. It was presumably triggered by grievances related to the sharing of water resources at the border (see the box below for more details on the cause of the flare-up). Human Rights Watch reported that as a result of the escalation over 50 people were killed, most of them civilians, and hundreds were injured. About 58,000 people in Kyrgyzstan and Tajikistan fled their homes or were evacuated and dozens of houses and several schools were destroyed.[[59]](#footnote-59) The following is an account of the conflict by the United States Institute of Peace.

Box 6: Account of April 2021 Conflict by the United States Institute of Peace[[60]](#footnote-60)

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| The latest conflict started with a dispute over a water intake station on the Kyrgyz-Tajik border near Kok-Tash in Batken region. The Kyrgyz side had been doing some work on the Golovnoy water distribution point in the upper reaches of the Isfara River. On April 28, someone from the Tajik side tried to set up a video monitoring camera, presumably to keep an eye on Kyrgyz use of the shared resource, a case of open-source technology and local initiative gone bad.  On April 28, civilians on both sides began fighting with rocks and clubs, and soon border troops from both sides were involved with live fire. The fighting escalated into a pitched battle with heavy weaponry, including machine guns and mortars, according to reports. Ominously, the conflict spread across the length of the border as Tajik troops took control of a highway leading to the Vorukh enclave, an island of Tajikistan completely enclosed by Kyrgyzstan. The fact that Tajik troops far from the original clash were involved points to intentionality.  Authorities in Batken region announced a local state of emergency in the rural districts of Ak-Say, Ak-Tatyr, and Samarkandek as of April 29 following ethnic clashes between residents in the Kyrgyzstan-Tajikistan border area. |

The April 2021 violence has been the worst cross-border military conflict in Central Asia in many years. As noted previously, the immediate cause of the conflict was a standoff over water distribution. Water is a vital resource in Central Asia, but one that’s increasingly scarce as a result of climate change, making it a source of tension and conflict. In spring and summer, when agricultural work begins, water consumption increases tenfold, leading to an escalation of tensions between Kyrgyz and Tajik citizens.

While state-to-state confidence-building measures and a more constructive role of the social media are important factors for the mitigation of the conflict, community-to-community trust building activities along the borders in the region can help manage the resource conflicts that often serve as the spark for clashes, while can prevent the clashes from escalating. In this context, the Kyrgyz and Tajik governments need to ensure the right to water for all citizens along the disputed border. In the short term, this means resolving issues around the management of disputed water facilities in a way that reflects respect for human rights. In the mid-term, there is an urgent need for well-resourced and climate-responsive programmes to ensure that all citizens have access to safe and affordable water when faced with the impacts of the climate crisis.

The “*Strengthening climate resilience of the Batken Province through the introduction of climate-smart irrigation and mudflow protection measures*” project has thus addressed a core issue related to water deficiency and poor access in selected localities, which has certainly served as a prevention intervention against such continuous border disputes over resources. This was confirmed by LSG and community members involved in this evaluation. They stated that the reduction of pressure on water resources resulting from the project has contributed to a relaxation of tensions over the availability of water. Also, the project’s cost-extension was partly motivated by the flare-up in the conflict at the border in April 2021. The Batken Regional Administration and local AOs brought to the attention of the project the need for additional support to increase water supply for the rural population due to the border tension with Tajikistan.

However, despite the significant relevance of the project to conflict prevention and resolution, the project was not designed to address these issues. The Project Document does not contain any references to cross-border violence or conflict. The analysis of the project context does not address any issues related to peace and security. Even its results framework does not contain any indicators or targets related to conflict intermediation or prevention. The project document is overall silent on these issues, although they are actually central to water management and climate change adaptation measures. This is a missed opportunity because the project could have been designed in a more integrated fashion to address through climate-smart interventions conflict challenges that plague the border areas of the Batken region.

Although the project was not designed and implemented with a clear conflict mediation and resolution perspective in mind, it has undoubtedly contributed to the reduction of tension in the region through the improvements it has generated in the availability of water through a more efficient use of the resource (as noted in the Effectiveness section of this report). Despite the anecdotal evidence collected through interviews with LSGs and community members interviewed for this evaluation, the benefits related to reduced conflict and tension cannot be quantified for this report because the project was not designed to track this dimension and the project team did not have the tools for the monitoring of this aspect of the project. However, the conflict-mitigation rationale provided by the Batken Region Administration and the respective AOs for the cost-extension of the project is an indication of the direction of this project on the continued tensions across the border.

Gender Mainstreaming

Given the focus of the project on rural areas and agriculture activities, it has by default had a significant focus on the gender dimension. The project design places women in the project target area at the center of the project by clearly recognizing that they experience specific challenges in their daily lives which are exacerbated by the effects of climate change. The project document recognizes that the needs and priorities of women, and particularly those of poor and vulnerable women, differ from those of men. The project document also recognizes that the roles of women and men are inter-dependent and there are few, if any, areas of social or economic activity that are purely women’s concerns.

The project’s gender strategy combines mainstreamed measures to ensure that women have equal opportunity with men to be heard, participate and benefit from project activities, together with measures specifically targeted to support women without overlooking the need to ensure the support and engagement of men. It adopts a three-pronged approach that ensures a meaningful participation of women, rather than mere token representation. The gender strategy has focused on (1) raising the awareness of the overall community of the differential gendered aspects of climate change; (2) ensuring and facilitating the participation of women and vulnerable groups in all aspects of project implementation and (3) specific livelihoods support to poor and vulnerable women.

The project has ensured the active participation of both sexes in livelihood activities. The project paid special attention to the participation of female-headed households and vulnerable groups in project activities, promoting their well-being and engagement in the decision-making processes. The involvement of women in project activities has been carefully tracked by the project team and is reported in the “Effectiveness” section of this report. The following is a brief summary of project’s achievements and challenges related to gender mainstreaming.

* The project team made efforts to mainstream gender in most project activities and results. Gender responsive community-based project initiatives were drafted to encourage the active involvement of women in their implementation. The selection of DIS initiatives included specific criteria to encourage applications by women-headed households. Despite these efforts, the results at the level of beneficiaries were mixed. A total of 18 women were the primary beneficiaries of the DIS initiatives, compared to 88 men – representing about 15% of beneficiaries. This is primarily due to the fact that men own land titles more commonly than women. This dynamic of land ownership could have been envisaged more effectively at the design stage of the project.
* The project encouraged the participation of female-headed households and vulnerable groups in consultative meetings, promoting their engagement in decision-making processes.
* Gender empowerment was included in the training components provided by the project to local authorities with the aim of further strengthening the engagement of women.
* In consultation with the UNDP Gender Specialist, the project prepared the study “*Climate Change and Gender in Batken Province*” for the elimination of barriers that prevent women in general and women farmers from benefiting from innovative climate change adaptation measures.

Challenges:

* The project lacked a dedicated gender expert in the team. To prioritize gender mainstreaming, the project would have benefitted from a dedicated gender specialist (perhaps even shared with another project). The involvement of a gender specialist in the project would have contributed to a more effective mainstreaming of gender in the project and a more even distribution of responsibilities within the team, allowing other specialists to focus on other priority areas
* In hindsight, there was a need to collect and collate more effectively gender-disaggregated data at the level of indirect beneficiaries to guide and monitor project interventions. The project could have assessed project effects beyond direct beneficiaries, such as the number of individuals who benefit from the installation of drip irrigation systems, and counting how many of the land owners are female. Efforts need to be made to measure/capture changes in power dynamics in the communities and the role of women in these communities, especially more broadly in decision-making.
* Further, the project could have played a greater role in supporting the local governments in mainstreaming gender-disaggregated data into adaptation planning processes. The project was a good opportunity for establishing a sustainable mainstreaming basis through the activities of local governments.

Overall, the evidence collected for this evaluation indicates that women have been involved in all stages of the project, from planning to implementation and monitoring. They have participated in significant numbers in working groups, trainings, baseline studies and formulation of local adaptation plans, and other project activities. Weaker results were achieved with regards to the ultimate beneficiaries of the drip irrigation systems, who are generally male due to the fact that they are primarily owners of the land.

# LESSONS LEARNED

The following are two major lessons that may be drawn from the experience of this project.

***Lesson 1: Dissemination of Innovative Approaches and Technologies Takes Time and Requires Sustained Engagement***

As has been discussed in this report, several interventions by GoK and development partners have taken place in the area of climate change adaptation. The project builds on the foundations laid out by these previous interventions. This kind of sustained engagement is based on the premise that addressing climate change challenges requires collective action. The self-organization of farmers is a crucial aspect of such collective action. Achieving this requires public sector support through incentives for the farmers to participate in collective decision-making and make individual commitments. However, the development of capabilities in the public sector, especially at the sub-national level, is a challenging task that requires a long-term engagement and repeated interactions between projects like the current one and public organizations and local communities.

The experience of this project showed that local authorities and communities develop trust when they see practical results. The project made efforts in the beginning to convince stakeholders of the effectiveness of adaptation measures. Some of the proposed solutions are innovative for the country and require ample and explanatory work on the part of the project and authorities. Further, the grant initiatives were crucial for demonstrating the usefulness and feasibility of various approaches and technologies. As has been noted in this report, while a lot of demonstrative work has taken place under this project, the dissemination of project experiences and results is still work in progress. Construed as a long-term process, this work will need to continue under the leadership of the Government. Interventions such as this project need to be conceived by taking into account the fact that ample time is needed for innovative measures to be accepted and taken up by farmers and thus the need for a lengthy period of engagement with local authorities and communities.

***Lesson 2: Climate Change Adaptation and Social Cohesion as Two Closely Interrelated Concepts***

Although the project was strictly defined and designed as a “*climate change adaptation*” project, it had a significant association with and strong implications for peacebuilding and social cohesion in the context of a region riven by community conflicts over water resources. Adaptation activities taking place at the level of communities, involving farmers and local authorities, closely interact with the power dynamics at the community level. The link between climate change and conflict is water, which in the Batken region is scarce and acts as a source of communal tension. Therefore, climate change adaptation does not take place in a vacuum – inter-ethnic and inter-community aspects are very important and will have to be taken into account. In the context of inter-communal conflict, the project’s contributions in the area of climate change adaptation are inseparable from its contributions in the area of conflict mitigation and resolution. Climate-resilient projects like this one, focused on water management, should be designed with a clear perspective on conflict-resolution in mind. It is precisely this focus on the conflict mitigation aspects of climate change adaptation that makes these initiatives more sustainable and efficient. Therefore, the design of the project would have been more effective if aspects of conflict mitigation and social cohesion had been included in the conceptualization and design of the project.

# CONCLUSIONS

The project “*Strengthening climate resilience of the Batken Province of the Kyrgyz Republic through introduction of climate smart irrigation and mudflow protection measures*” represents a good example of an effective cooperation between UNDP, the Government of Kyrgyz Republic and the Russian Federation. The project also established a strong mechanism of engagement for national institutions and local communities.

The project has been a quite relevant intervention to the country’s needs and priorities. The project has supported a clear priority of the Government of Kyrgyzstan to ensure climate-resilient livelihoods at the community level through the installation of efficient and water-saving drip irrigation systems, rehabilitation of agricultural water supply infrastructure, and capacity-building of local communities in Batken region. The adaptation measures promoted by the project, accompanied with hands-on investment initiatives supported by the project with grants have provided tangible contributions to the targeted communities. Stakeholders interviewed for this evaluation, including beneficiaries in the targeted communities, highly valued the objectives and contributions of the project. The project has focused on a vulnerable section of the population and has pursued practical activities in the form of drip irrigation systems and water infrastructure projects that have strong demonstration effects. The project’s investment has generated co-financing from the involved communities. Through its water-saving effects, the project has also contributed to the diffusion of tension between the various communities involved in the conflict in the border area.

Despite the challenging circumstances that the project faced during its implementation, especially those related to COVID-19, the project team and stakeholders took a flexible approach and tried a variety of options, approaches and alternatives to achieve the project’s objectives. Nevertheless, the project has experienced a number of delays which need to be addressed quite effectively in the remainder of the project’s lifetime.

Going forward, project stakeholders must focus on two priorities: (i) the orderly completion of outstanding activities; and, (ii) proper handover of project products and processes to the respective national counterparts. The most critical aspect that project stakeholders should focus on in the last few weeks of the project and which should be a central theme of the project’s last project board meeting is the sustainability of project results. The recommendations provided further in this report provide some guidance on the critical sustainability matters that require the attention of stakeholders, and particularly the Ministry of Agriculture, Forestry and Water Resources, the Ministry of Emergency Situation and the State Administration of Batken Region, which must ensure the continuity of the processes initiated under this project.

# RECOMMENDATIONS

The evaluation also identified the following key recommendations for project stakeholders. Given that the project is at its closing stage, these recommendations are forward-looking in nature and relate to measures that could be taken to promote the project’s objectives and carry the agenda forward.

| **Recommendation** | **Responsible Entity** | **Timeframe** |
| --- | --- | --- |
| ***Recommendation 1: Completing Pending Activities***  As a first and urgent step, in the remainder of the project lifetime (till the end of September 2022), the Project Team and national stakeholders should complete all outstanding activities before the closure of the project. The project should focus on realizing full budget expenditure, as planned. Key priorities that require the project’s attention in the next few months are the following:   * Installation of the four weather stations. * Implementation of the activities related to the installation of the drip irrigation systems water intake equipment, and well development, funded through the expanded budget.   In the last Project Board meeting, project stakeholders should take note of all pending tasks and activities and make a decision on what is feasible to complete by the time of the project’s closure. Whatever activities will not be possible to complete by that time should be handed over for completion to the respective national authorities with a clear action plan that outlined the steps that are necessary for their completion. | **Project Team & Ministry of Agriculture & local level authorities and communities** | **Short-term** |
| ***Recommendation 2: Strengthen the sustainability of the project by further institutionalizing project achievements and promoting the dissemination of project approaches and technologies***  To strengthen the sustainability of project results, the project team and the national counterparts should focus in the last few months of the project more intensively on the way in which the results of the project will be disseminated in other locations and the way in which a possible replication of the project’s practices could occur.  In the remaining period of this project, the national partners should take a more proactive approach for the upscaling and replication of the adaptation project measures in other locations.   * The project team should develop a plan for the dissemination of project results. * A formal handover of all the knowledge and training materials produced under the project should be organized by the project team, identifying respective national counterparts who will be responsible for the receipt of the materials. * Then project’s last final report should be focused on documenting the major lessons learned from the project and outlining the main approaches piloted under the project that could be replicated elsewhere. | **Project Team and National Partners** | **Short and Medium-Term** |
| ***Recommendation 3: Integration of Conflict Mitigation Concerns into Climate-Resilient Interventions***  In future projects similar to this project, stakeholders should be careful to integrate conflict mitigation concerns into climate-resilient interventions.  In the future, UNDP should collect data on the effects of projects on conflict mitigation in the areas where project contributions occurred. This data may be used to inform future similar interventions by UNDP, GoK and development partners.  UNDP should follow the procedures that enable better integration of conflict mitigation concerns into projects that target environmental concerns that are directly related to the sources of conflict. UNDP should also strengthen links between the programme pillars, so that when projects within one pillar are designed, they can benefit from inputs from other pillars. | **Project Team and UNDP** | **Medium-Term** |
| ***Recommendation 4: Greater Focus on Gender Mainstreaming***  In future projects similar to the project, project stakeholders should include a dedicated gender expert in the design of the project. The involvement of a gender specialist in the project will contribute to a more effective mainstreaming of gender in the project and a more even distribution of responsibilities within the team, allowing other specialists to focus on other priority areas.  Similar projects targeting community development should collect and collate more effectively gender-disaggregated data at the level of indirect beneficiaries to guide and monitor project interventions.  Also, such projects should seek to assess project effects beyond direct beneficiaries, such as the number of individuals who benefit from the installation of drip irrigation systems, and counting how many of the land owners are female. Efforts should be made to measure/capture changes in power dynamics in the communities and the role of women in these communities, especially more broadly in decision-making.  Further, such projects could play a greater role in supporting the local governments in mainstreaming gender-disaggregated data into their adaptation planning processes. | **UNDP and National Government Partners** | **Future** |

# ANNEX I: EVALUATION’S TERMS OF REFERENCE

**TERMS OF REFERENCE for**

**International consultant to conduct** **Final Evaluation of**

**the UNDP-RTF “Strengthening climate resilience of the Batken Province of the Kyrgyz Republic through introduction of climate smart irrigation and mudflow protection measures” Project (hereafter Batken project, PID 00113942)**

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| |  |  | | --- | --- | | Assignment Title | International Consultant to conduct the Final Evaluation of Batken project | | Type of Contract | Individual Contract (IC) | | Start/End Dates | 16 May – 1 July 2022 | | Estimated working days | 24 effective working days | | Supervisor | NAP project manager and Officer on M&E | | Location | Home-based (with one trip to Bishkek and Batken province of KR up to 7 nights) | | Country | Kyrgyz Republic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 1. **PURPOSE OF THE FINAL EVALUATION**   In line with UNDP Evaluation guidance, rules and procedures, as well as UNDP M&E Policy, the UNDP Country Office in the Kyrgyz Republic is commissioning a final evaluation of the Strengthening climate resilience of the Batken Province of the Kyrgyz Republic through introduction of climate smart irrigation and mudflow protection measures implementation, funded by the Russian Federation-UNDP Trust Fund Development and implemented by the United Nations Development Programme (UNDP) in the Kyrgyz Republic. This final evaluation is intended to analyze project’s progress and results, identify problems and constraints that have been encountered in implementation, formulate important best practices and lessons to be learned. The evaluation will be to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.   1. **BACKGROUND AND CONTEXT**   Since 2019, under the framework of UNDP Country Programme Document (CPD) 2018-2022, UNDP in the Kyrgyz Republic has been implementing the Batken Project in amount 900,000 USD.  Project Information:   |  |  | | --- | --- | | Project Title | Strengthening climate resilience of the Batken Province of the Kyrgyz Republic through introduction of climate smart irrigation and mudflow protection measures | | Project ID | 00113942 | | CPD Outcome and Output | Outcome 3. Environment, climate change and disaster risk management.  Output 3.1. Policy, legal and institutional systems enhanced to apply innovative climate change mitigation and adaptation practices across the country.  Output 3.3. Innovative and smart solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste, for better livelihoods and employment, with the focus on women and youth. | | Project dates | January 2019 – September 2022 | | Project budget | Committed: USD 0.9 million | | Source of funding | Russian Federation |   The project is part of the implementation of the National Adaptation Plan to climate change impacts of the Kyrgyz Republic. It aims at increasing the resilience and reducing the damage from climate change in the target agricultural communities of the Batken Province of the Kyrgyz Republic, which is the most vulnerable region in the country to climate change impacts.  Reducing vulnerability achieves through comprehensive promotion of mutually complementary solutions, replicating and scaling up climate change adaptation practices that have been successfully piloted by UNDP in such areas as agriculture, integrated water resource management and DRR. The project intends implement following approaches, that will allow to reduce climate risks and increase the sustainability of interventions:   1. Creation of a system for provision of agro-climatic information by improving quality of meteorological forecasting system and its usage; 2. Introduction of new technologies for effective water use and its accounting, which will in turn allow saving up to 11 000 m3 of irrigation water annually and implementation of activities on rehabilitation and protection of on-farm irrigation systems, which will allow to reduce the level of damage stemming from hydrological disasters in an area of about 22 000 hectares, and increase the water availability for 12 977 hectares of an irrigated land; and. 3. Stakeholders awareness raising on climate change adverse impacts, vulnerabilities and adaptation opportunities. Outcome 1: Ministry of Justice of KR provides accessible, affordable, efficient and quality services to resolve justice problems of project target groups in the selected provinces of the Kyrgyz Republic.   Within this context, UNDP in the Kyrgyz Republic intends to hire an International Consultant to conduct a final evaluation of the implementation of the Batken project, for a period of 21 working days commencing on the 16th of May 2022 as per requirements set forth in this Terms of Reference (TOR).   1. **EVALUATION APPROACH AND METHOD**   The final evaluation is intended to assess the degree to which Batken project has been able to deliver against the overall objective, the outcomes, the deliverables and the strategies and implementation mechanisms being applied during project implementation (2019-2022). In particular, the review is expected to assess relevance, effectiveness, efficiency, sustainability, national ownership, impact, progress and results of the project, identify problems and constraints that have been encountered in project’s implementation, as well as formulate important good practices and lessons to be learned, as defined and explained in the UNDP Evaluation Guidance. A set of key questions covering each of these criteria have been drafted and included within this ToR (section D).  The evaluation is expected to follow a participatory and consultative approach ensuring close engagement with relevant government, line ministries and actors, including but not limited to: government officials, Ministry of Agriculture, Hydrometeorological Service under Ministry of Emergency Situation, local-self-governments, Batken province government, representatives of water users associations, UNDP staff and management, donor’s representatives, and development partners. The evaluation must provide evidence-based information that is credible, reliable and useful. Also, evaluation should employ a combination of both qualitative and quantitative evaluation methods and instruments.  The evaluator will review all relevant sources of information, such as the Project document, project progress reports, relevant national strategic and legal documents, any other files, documents and materials that the evaluator considers useful for the evidence-based assessment. The list of documents that the project team will provide to the evaluator for review is included in Annex A of this Terms of Reference.  It is recommended that the evaluation methodology includes the following: documentation review (desk review), on-line and off-line interviews with relevant stakeholders and UNDP personnel. The evaluation report must include a chapter providing a set of conclusions, recommendations and lessons learned.   1. **EVALUATION OBJECTIVES AND CRITERIA**   This final evaluation is intended to provide UNDP with an objective assessment of the Batken project in delivering against goal, outcomes and deliverables of the project as articulated in the Project Document between UNDP in the Kyrgyz Republic and the Russian Federation-UNDP Trust Fund Development. It shall provide also clear recommendations for the future direction of any new project interventions. The findings of the final evaluation should:   * Provide a full assessment of relevance, effectiveness, efficiency, sustainability, progress and results of the Batken project since launching phase; * Provide a complete analysis and evaluation of the key results and indicators as set out in the AWPs and in the related M&E frameworks developed; * Provide a comprehensive overview of the project’s key challenges and lessons learned; * Provide a snapshot assessment of the project’s value for money, including the optimal use of resources to achieve the intended overall goal, outcomes and deliverables; * Provide guidance on the state of the project intervention in order to inform future decisions regarding the strategic direction of a possible future interventions in line with MoA, MES and UNDP’s priorities in the climate change adaption area; * Assess whether the current focus areas that the project is engaged in are the most relevant for the promotion of climate change adaptation in the Kyrgyz Republic and whether UNDP is still well positioned to effectively and efficiently support the vision and priorities of the Kyrgyz Republic, to strengthen climate change adaptation and to meet the needs of the most vulnerable groups of population; * Identify any activities which should be eventually expanded into a new project; and any ‘quick win’ initiatives that a new project should engage in; determine whether there are certain activities that a new project should not be engaged in or pursue; * Identify risk factors that may hinder progress and propose risk mitigation/management strategies to ensure success and effective implementation of a new project.   The evaluation of the project performance will be carried out, based on expectations set out in the Project Results and Resources Framework (RRF), which provides performance and impact indicators for project implementation. The evaluation will at minimum cover the criteria of: Relevance, Effectiveness, Efficiency, Sustainability and Impact.  The evaluation will be guided by the following criteria and questions:  Relevance:   1. To what extent Batken project activities are relevant to enhancing climate change adaptation in the Kyrgyz Republic? 2. To what extent Batken project’s work towards sustainable climate change adaptation is consistent with and responding to current and emerging national and local policies, priorities and needs of the intended beneficiaries? 3. To what extent does this work sustain the current vision and priorities of the Kyrgyz Republic and its people, support the most vulnerable groups of population and contribute to foster Agenda 2030 for Sustainable Development? 4. To what extent is the project coordinated with other initiatives in the climate change adaptation field? 5. How well the design and implementation of the project address the needs of the most vulnerable groups in the country? 6. To what extent did UNDP project adopt gender-sensitive and human rights-based approach?   Effectiveness:   1. How effective have the Batken project strategies, approaches and activities been towards achieving the project’s intended objectives and targets? 2. What were the major factors influencing the achievement or non-achievement of the objectives? 3. Has the Batken project successfully leveraged its partnerships with relevant governmental agencies, civil society and other beneficiaries? Is the cooperation with the selected partners leading to the most effective results? 4. What observed initial changes can be attributed in general terms to Batken project activities and outputs? 5. How should the development approach/theory of change adjust for future programming? 6. To what extent have women and vulnerable group of population (VGP) benefited from the project results? 7. To what extent have the results at the outcome and output levels generated results for gender equality, VGP and women empowerment? 8. To what extent has the project been appropriately responsive to the needs of the national partner priorities?   Efficiency:   1. Have Batken project resources (funds, expertise, time, staffing) available to the project been utilized in the most appropriate and economic way possible towards the achievement of results? 2. How have partnerships influenced the efficiency of the project in delivering against its portfolio? 3. What realistic new delivery options the project shall consider to maximize efficiency and cost-effectiveness? 4. To what extent did UNDP promote cross-cutting issues like gender equality, women empowerment, human rights? 5. To what extent have project funds and activities been delivered in a timely manner? 6. To what extent have resources been used efficiently? Have activities supporting the strategy been cost-effective?   Sustainability, national ownership and impact:   1. To what extent will the benefits of the Batken project work in this area continue? 2. Is the level of national ownership and the measures that serve to enhance national capacity enough to guarantee the sustainability of results? 3. Is there a resource mobilization strategy in place for the project to ensure the continuation of benefits? 4. To what extent do national partners have the institutional capacities in place to sustain the outcome-level results? 5. How strong is the commitment of the Government and other stakeholders to sustaining the results of Batken project support and continuing initiatives? 6. To what extent are policy and regulatory frameworks in place that will support the continuation of benefits? 7. To what extent have partners committed to providing continuing support (financial, staff, aspiration, etc.)? 8. Are there any financial risks that may jeopardize the sustainability of the project outputs? 9. Are there any social or political risks that may jeopardize sustainability of project outputs and the project’s contributions to country programme outcomes and outputs? 10. To what extent do stakeholders support the project’s long-term objectives? 11. **MAINSTREAMING**   The evaluation is also expected to assess the extent to which the project was successfully mainstreamed with other UNDP cross-cutting priorities and six Signature Solutions, including gender equality and women empowerment, Vulnerable groups, LNOB, etc.   * Is the gender marker data assigned to this project representative of reality? * To what extent has the project promoted positive changes in gender equality and the empowerment of women and VGP ? Were there any unintended effects?  1. **FINAL DELIVERABLES**   The International Expert will be expected to produce the following deliverables within the 24 effective persons days:   1. Preparation (Desk Review) and development of methodology 2. Draft Evaluation Inception Report (max 4 pages): Prior to embarking on the data collection exercise and desk review, the International Expert will be required to prepare an inception report which details the understanding of what is being reviewed and why; how it proposes to answer the main evaluation questions; and the work-plan of the review. This should be produced before the evaluation starts (before any formal evaluation interviews and surveys). 3. On-line and off-line evaluation (on-line and off-line interviews, meetings, as well as presentation of preliminary findings) 4. Draft Final Evaluation Report: The International Expert will be required to submit a draft report for review to UNDP and to ensure that it meets the required quality criteria. 5. Evaluation Brief (Presentation): If required, the International Expert will be requested to present the initial findings and recommendations of the report to UNDP and Russian Federation-UNDP Trust Fund Development, government counterparts, donors, and other climate change adaptation development partners, as appropriate. 6. Final Evaluation Report: Following receipt of UNDP’s and initial comments, the International Expert will be required to submit a final report which clarifies and addresses any clarifications requested in the initial review.   The International Expert will be paid according to the completion of deliverables as detailed below:   |  |  |  |  | | --- | --- | --- | --- | |  | Deliverables/ Outputs | Target Due Dates | Percentage of Contract | | 1 | Submission of developed methodology for final evaluation.  Submission of evaluation inception report (max 4 pages) and work-plan | 23 May 2022 | 100 % | | 2 | Presentation of initial findings, recommendations and draft final evaluation report submitted to UNDP and Russian Federation-UNDP Trust Fund Development | 20 June 2022 | | 3 | Submission of Final Evaluation Report | 1 July 2022 |  1. **EVALUATOR ETHICS**   The international consultant has responsibility over submission of final report. The evaluator selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities. The project will provide an interpreter to support the international consultant during the on-line interviews with the national counterparts. The qualification for International consultant is reflected below.  The evaluation consultant will need to abide by the highest ethical standards and will be required to sign a Code of Conduct upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluations” which are available here: <http://www.unevaluation.org/document/detail/102>. The consultant 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 consultant must also ensure security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses with the express authorization of UNDP and partners.   1. **DUTY STATION**   This consultancy will be home-based with one travel to Bishkek and Batken province, Kyrgyz Republic (up to 7 overnights)   1. **TIMEFRAME** 2. The contract will come into effect on 16 May 2022 and end on 1 July 2022 3. The international consultant will work for a period of ***24 effective working days*** within the dates indicated as per the tentative schedule below:    1. Home-based work:  ***4 days***        1. Review of background documents, reports, etc.    2. On-line and offline evaluation: ***17 days***        1. On-line and off-line/interviews, etc.       2. Presentation of initial findings and recommendations to UNDP, Russian Federation-UNDP Trust Fund Development and selected audiences    3. Home-based work: ***3 days***        1. Finalization of report       2. Submission of final report 4. **REPORTING REQUIREMENTS AND MANAGEMENT ARRANGEMENTS**  * The International Consultant will report to the NAP project manager and Officer on M&E and on a weekly basis as work against deliverables progresses. She/he will be accountable to UNDP on the timeliness and quality of the deliverables; * The International Consultant will be required to review documents and consult with UNDP management and Batken project team members to better understand the project, including its design process, implementation aspects and expected results; * The International Consultant will be required to conduct interviews with UNDP staff, government counterparts, implementing partners, donor representatives, project’s beneficiaries and other parties relevant to this evaluation, as identified by UNDP and Russian Federation-UNDP Trust Fund Development; * Upon completion of the assignment, the International Consultant will submit the final report based on the results achieved in agreed format. The final report will be required to be approved by the NAP project manager and officer on M&E which will serve as a justification for payment.  1. **QUALIFICATION AND COMPETENCY REQUIREMENTS**   The International Consultant will require the skills, knowledge and expertise detailed below:   * At least Master’s degree or higher in natural or agriculture or social science; * Proven track record of evaluation of projects and/or programmes focusing on environment protection or climate change or agriculture confirmed with at least two project evaluation; * Experience in working in Central Asian or CIS countries is preferred; * Fluency in English. Knowledge of Russian is an asset.  1. **SCOPE OF PRICE PROPOSAL AND SCHEDULE OF PAYMENTS**   Contracts based on lump-sum The financial proposal shall specify a total lump sum and payment terms around specific and measurable (qualitative and quantitative) deliverables. Payments are based upon output, i.e. upon delivery of the services specified in the TOR. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including travel, per diems, and number of anticipated working days).  Preferred Currency of Offer: United State Dollars (USD).   1. **ADDITIONAL REQUIREMENTS FOR RECOMMENDED CONTRACTORS**   **Statement of Medical Fitness for Work.**  Individual Consultants/Contractors are required to have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director. The cost of required vaccinations/inoculations, when foreseeable, must be included in the financial proposal. Any unforeseeable vaccination/inoculation cost will be reimbursed by UNDP.  Where there is no UN office nor a UN Medical Doctor present in the location of the Individual Contractor prior to commencing the travel, either for repatriation or duty travel, the Individual Contractor may choose his/her own preferred physician to obtain the required medical clearance.  **Inoculations/Vaccinations**  Individual Consultants/Contractors whose assignments require travel and who are over 65 years of age are required, at their own cost, to undergo a full medical examination including x-rays and obtaining medical clearance from an UN-approved doctor prior to taking up their assignment. | | | | **Security clearance**  The Consultant should undertake the Security Training (BSAFE) tests prior to travelling. These requirements apply for all Consultants, attracted individually or through the Employer. | | | |  | | --- | | **Travel requirements**  Home based with travel to Bishkek and Batken, Kyrgyz Republic (up to 7 overnights). | | | 1. **UNDP INPUTS** | | UNDP will provide the following support:   * Facilitation of introduction letters and/or requests for on-line/off-line meetings upon request with stakeholders and beneficiaries; * Substantive inputs to and quality control of deliverables; * Project related documents such as Project Document, Annual Work Plans and/or Progress Reports; * Interpreter if needed; * Security charges are not applicable.   **Annex A. Key Background documents**  ***General documentation***   * + UNDP Programme and Operations Policies and Procedures (POPP);   + UNDP Handbook for Monitoring and Evaluating for Results;   + UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported.   ***Project documentation***   * + Project document;   + List and contact details for project staff, key project stakeholders, including Project Boards members, and other partners to be consulted;   + Project sites, highlighting suggested visits;   + Annual Work Plans;   + Annual Project Reports;   + Project budget and financial data;   + Project Board Meeting minutes;   + Knowledge and outreach related products. | |  | |

# ANNEX II: INTERVIEW PROTOCOL

For each interview obtain the following information of all the people who were part of the meeting

|  |  |  |
| --- | --- | --- |
| Name of Interviewee | Title, Department | Institution |
|  |  |  |
| Date of Interview | Time | Location |
|  |  |  |
| Other Persons present/title | Team members present |  |
|  |  |  |

***Below is the list of indicative questions which we need to answer for the evaluation. Depending on who we interview, we need to choose among the questions below the suitable ones to ask (particularly given that we have normally just around 1 hour for each interview). For example, with implementation partners of specific projects, we may want to focus on part A and some additional questions in other parts as appropriate. For donors and other development partners we may want to focus on part B.***

1. **effectiveness:**
   1. To what extent has the project **achieved its expected objectives**? Were all the planned project outputs and outcomes achieved? What were the **key results achieved** (Please describe, in particular, what **“changes”** have been brought about by the project)?
   2. Were there any key results not achieved and why? Were there any positive or negative unintended results?
   3. What was the quality of the deliverables?
   4. Do you think that all the strategies and plans that were supported will be implemented? Do you think that for projects like this there should be more focus on implementation?
   5. What were the major **factors contributing** to the achievements of this project? What were the **impeding factors**?
   6. **Partnerships**: Who were the partners in implementing the project? In your view, how effective has UNDP been in using its partnerships?
   7. To what extent were government counterparts engaged and interested in the project activities? What roles did they play? Can you mention specific government actors and specific roles they played?
   8. UNDP’s role in **policy guidance**: Has UNDP provided upstream policy advisory services in this project? To what extent was this project able to affect policy change? If yes, can you mentioned some specific examples? What is the implication of such policy change to the country?
   9. In what ways can UNDP strengthen its policy advisory role (what worked and what didn’t work; why)?
2. **coherence**
   1. To what extent is this intervention coherent with other interventions which have similar objectives?
   2. To what extent is the intervention coherent internally?
   3. To what extent is the intervention coherent with wider governmental policies?
   4. To what extent is the intervention coherent with international obligations?
3. **relevance:** 
   1. To what extent do you think the project objectives were in **alignment with country needs and national priorities, policies or strategies**? How about in terms of the **local needs**?
   2. How was the work conducted under this project connected to the broader reform agenda that is under way now in Kyrgyzstan? Was it integrated with the existing reform architecture led by the Presidential Administration? Please provide specific examples.
   3. Was the work of this project sufficiently focused on the sub-national (local) level? Do you see these types of projects being more useful at the national or sub-national levels?
   4. To what extent were the **approaches taken by the UNDP** appropriate in terms of the project **design and ‘focus**,’ and the balance between **upstream and downstream** efforts?
   5. How coherent was the project in terms of how it fit with the policies, programmes and projects undertaken **by other development partners**?
4. **efficiency:**
   1. **Managerial and operational efficiency**:
   2. Has the project been implemented **within expected dates, costs estimates**? Explain **‘factors’** influencing the level of efficiency.
   3. Has the project management taken prompt actions to solve implementation and other operational issues? What was **project management structure** (incl. reporting structure; **oversight** responsibility)?
   4. How adequate were the Project Management arrangements put in place at the start of the project? Did the project display effective adaptive management?
   5. What were the implications of the project’s organizational structure for the its results and delivery?
   6. **Progammatic efficiency:**
5. Were the financial resources and approaches envisaged appropriate to achieving planned objectives? Was there a ‘good’ mix of upstream and downstream efforts to maximize the results?
6. Were the resources focused on a set of activities that were expected to produce significant results (**prioritization**)? Has the project achieved ‘value for money’?
7. Has the project followed any known ‘best practices’?
8. Were there any efforts to ensure ‘synergies’ with other projects within UNDP (and those of other partners)? Explain results, and contributing factors.
   1. What could have been done to improve the overall efficiency of the project?
9. **sustainability:**
   1. To what extent are **project benefits likely to be sustained** after the completion of the project? What are the supporting/ impeding factors?
   2. What are the risks that are likely to affect the persistence of project outcomes?
   3. What plans were put in place to ensure the continuity of the efforts (e.g., funding, technical capacity)? Has there been an **exit strategy** that describes these plans?
   4. Do you think that the various key stakeholders see that it is in their interest that the project benefits continue to flow?
   5. Would you want to see this project extended in its current form or some other form?
   6. Do you think a project like this would be useful in promoting the achievement of SDGs in Kyrgyzstan?

**b. assessment of the project’s strategic positioning**

* 1. To what extent has the project been **responsive** to meeting the needs of the country? How responsive was the project to changes in development priorities?
  2. To what extent has the project been able to **integrate the concept of sustainable development** in the policymaking process in Kyrgyzstan (design, allocation of resources and implementation)? Examples?
  3. To what extent has the project been able to broker **South-South cooperation** (i.e., adopt lessons and best practices available in other countries, and share its own with others, for mutual learning). Examples?
  4. What **was the comparative advantage of** UNDP in the area of sustainable development, when compared to other actors in the same area?
* To what extent has UNDP been able to provide **technical guidance**, and knowledge?
* What are UNDP’s **comparative strengths**, vis-à-vis other development partners, if any?
* To what extent do UNDP have the skills and expertise needed to support this area in Kyrgyzstan?
  1. To what extent has the project been able to establish **partnerships and networks** with relevant partners and build strategic alliances in supporting key national priorities in the sustainable development area?
  2. What do you think would be the **role of UNDP in helping Kyrgyzstan planning for, implementing strategies to achieve and/or monitor progress towards the Sustainable Development Goals?**

**C. Other issues**

Are there any issues that you would like to raise about the project’s performance that have not been covered in this interview?

# ANNEX III: EVALUATION MATRIX

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Evaluation Criteria** | **Key Questions and Sub-Questions** | | **Indicators/Success Standard** | | | **Data Sources** | | **Data Collection Methods/Tools** |
| **Relevance (Design and Focus):** How do the objectives of the project relate to the main objectives of UNDP and to the development priorities of the Government of Kyrgyzstan? | | | | | | | | |
| Is the project relevant to UNDP priorities? | * To what extent is UNDP’s engagement a reflection of strategic considerations, including UNDP’s role in the particular development context in Kyrgyzstan and its comparative advantage vis-à-vis other partners? | | * Priorities and work areas are incorporated | | | * United Nations Global Strategy * UNDAF * UNDP Country Action Plan for Kyrgyzstan * UNDP Strategic Plan 2018-2021 * Project document * National policies and strategies | | * Document analysis * UNDP website * Interviews with UNDP and project partners |
| Is the project relevant to Kyrgyzstan’s sustainable development objectives? | * Was the design of the project adequate to properly address the issues envisaged in the formulation of the programme? * What were the inherent assumptions in the original design? * Is the log frame still appropriate? * Should baselines be added and indicators adjusted? * Is the risk matrix still appropriate or should it be upgraded? * How are risks mitigated? * Is the project country driven? * What was the level of stakeholder participation in project design? * What was the level of stakeholder ownership in implementation? * Does the project take into account national realities, both in terms of institutional capacity and legal and policy frameworks? | | * Degree to which the project supports national objectives * Degree of coherence between the project and national priorities * Appreciation from national stakeholders with respect to adequacy of project design and implementation to national realities and existing capacities * Level of involvement of government officials and other partners in the project design process * Coherence between needs expressed by national stakeholders and UNDP criteria | | | * Project document * National policies and strategies * Key project stakeholders * Partners | | * Document analysis * UNDP website * Interviews with UNDP and project partners |
| **Coherence: How compatible is the project design, activities and results to other interventions in the sector in the country and the Batken region?** | | | | | | | | |
| Is the project internally coherent in its design? | * Are the activities and outputs of the programme consistent with the intended outcomes and effects? * Are there logical linkages between expected results (log frame) and the project design | | * Level of coherence between project design and project implementation | | | * Programme and project documents * Key project stakeholders * Project team | | * Document analysis * Key interviews |
|  | * To what extent was UNDP’s selected method of analysis and delivery appropriate to the development context? | | * Number of government and regional stakeholders engaged in implementation | | | * Programme and project documents * Key project stakeholders * Partners | | * Document analysis * Key interviews with stakeholders and partners |
| Is the project consistent with other actors’ interventions in the same context? | * To what extent is there coordination and harmonisation with other interventions in the same context? * To what extent are there synergies and linkages between interventions? | | * Number of interventions related to climate change * Numbers of indicators and activities related to climate change and climate smart irrigation and mudflow protection measures. | | | * Programme and project documents * Key project stakeholders * Partners | | * Document analysis * Key interviews with stakeholders and partners |
| **Effectiveness (of management processes and their appropriateness in supporting delivery): To what extent have the expected outcomes and objectives of the project been achieved or has progress been made toward their achievement?** | | | | | | | | |
| * Has the project been effective in achieving the expected outcomes and objectives? | * To what extent have project results/targets been achieved or has progress been made towards their achievement? | | * Extent to which indicators in project document results framework and log frame have been achieved | | | * Project documents * Project team and relevant stakeholders * Data reported in project reports | | * Document analysis * Interviews |
| * What has been the contribution of other UNDP projects, partners, and other organizations to the project results, and how effective have project partnerships been in contributing to the project’s work? | | * Number of partnerships created * Partners report better capacity due to support provided by project * Partners report being more effective due to support provided by project | | | * Project team and partners * Data reported in project reports * Key stakeholders and partners | | * Document analysis * Interviews |
| * What lessons can be learned regarding effectiveness for other similar projects in the future? | * What were the positive or negative, intended or unintended, changes brought about by the project’s work? | | * Lessons learned from activities that have been implemented so far | | | * Data collected through the evaluation * Work plans * Monitoring and evaluation (progress reports) * Project team * Key stakeholders | | * Data analysis * Interviews |
| * How effectively has gender been mainstreamed into the project? | * To what extent did the project benefit women and men equally? | | * Sex disaggregated data * Gender based analysis undertaken * Number of activities with a gender focus or component * Number of women/men directly engaged through activities * Percentage of change in gender balance in key stakeholder/partner staffing | | | * UNDP * Project team * Other UN agencies * Project partners * Project documents * NGOs * CSOs | | * Document analysis * Interviews * Survey |
| **Efficiency (of programme implementation): Was the project implemented efficiently in line with international and national norms and standards?** | | | | | | | | |
| Was project support provided in an efficient way? | * Has the project implementation strategy and approaches, conceptual framework and execution been efficient and cost effective? * Are they sufficiently sensitive to the political and development constraints of the country? | | * Availability and quality of financial progress reports * Timeliness and adequacy of reporting provided * Level of discrepancy between planned and utilized financial expenditures * Planned vs actual funds leverage * Costs in view of results achieved comparted to costs of similar projects from other organizations * Adequacy of project choices in view of existing context, infrastructure and cost * Quality of results-based management reporting (progress reporting, monitoring and evaluation) * Occurrence of change in project design/implementation approach (i.e. Restructuring when needed to improve project efficiency) | | | * Project documents * Project evaluations (progress reports) * UNDP * Project team * Key stakeholders | | * Document analysis * Key interviews * FGDs |
| * Has there been an economical use of financial and human resources? * Have resources (funds, human resources, time, expertise, etc.) been allocated strategically to achieve outputs? | | * Efficiency of financial and human resources allocation | | | * Project Document * Progress reports * Program reports * Work plans * Project staff * Stakeholders | | * Document analysis * Key interviews * FGDs |
| * To what extent were quality outputs delivered on time? | | * Timely delivery of outputs | | | * Project Document * Progress reports * Program reports * Work plans * Project staff * Stakeholders | | * Document analysis * Key interviews * FGDs |
| * Could a different approach have produced better results? | | * Ex-post identification of bottlenecks, delays and other problems, that could have been prevented and/or avoided. | | | * Project Document * Progress reports * Program reports * Work plans * Project staff * Stakeholders | | * Document analysis * Key interviews * FGDs |
| * How is the project management structure operating | | * Functionality of the management structure. | | | * Project Document * Progress reports * Program reports * Work plans * Project staff * Stakeholders | | * Document analysis * Key interviews * FGDs |
| * To what extent did monitoring systems provide management with a stream of data that allowed it to learn and adjust implementation accordingly? * Did it help ensure effective and efficient project management and accountability of results? | | * Lessons learned from activities implemented so far | | | * Project Document * Progress reports * Program reports * Work plans * Project staff * Stakeholders | | * Document analysis * Key interviews * FGDs |
| **SUSTAINABILITY (of project’s general implementation structure, modalities and processes in the longer term): What is the likelihood of the continuation and sustainability of the programme outcomes and benefits after the completion of the project?** | | | | | | | | |
| What is the sustainability of the project? What are the major factors which will influence the achievement of sustainability of the project? | | * What indications are there that the project results will be or have been sustained, e.g. through requisite capacities (systems, structures, staff, etc.)? | | * Involvement of government institutions in project implementation * Government support of the project * Number /quality of analysis done to assess local capacity potential and absorptive capacity * Proportion of expertise utilized from international experts compared to national experts | * Program documents * Project staff * Key stakeholders * NGOs | | * Document analysis * Key interviews * FGDs | |
| * To what extent has a sustainability strategy, been developed or implemented? | | * Number /quality of analysis done to assess local capacity potential and absorptive capacity * Capacity development trainings developed * Capacity development trainings implemented | * Program documents * Project staff * Key stakeholders * NGOs | | * Document analysis * Key interviews * FGDs | |
| * To what extent are regulatory frameworks in place that will support the continuation of benefits? | | * Number of regulatory frameworks drafted/initiated * Number of regulatory frameworks implemented | * Project Staff | | * Document analysis * Interviews | |
| How will gender and social inclusion be mainstreamed by primary stakeholders? | | * How will concerns for gender equality, human rights and human development be taken forward by primary stakeholders? | | * Sex disaggregated data * Data disaggregated by other relevant social categories * Gender indicators * Social inclusion indicators * Gender-based analysis undertaken | * Project staff * Key stakeholders * Partners * NGOs | | * Document analysis * Interviews | |
| **Partnership Strategy: What is the process and result of the establishment of partnerships and collaborative relationships developed by the project with local, national and international entities?** | | | | | | | | |
| What is the partnership strategy for the project? | | * To what extent were partnership modalities conducive to the delivery of outputs? | | * List of partners * Number of partners involved in contributing to project outputs | * Progress reports * Project staff * Key partners | | * Document analysis * Interviews | |
| * Are there current or potential complementarities or overlaps with existing partner programmes? | | * Number of existing partner programmes * Number of UNDP projects or partners contributing to project results | * Progress reports * Project staff * Key partners | | * Document analysis * Interviews | |
| * How have partnerships affected the progress towards achieving the outputs? | | * Number of outputs being achieved * Number of partners involved in contributing to outputs | * Project document * Progress reports * Project staff * Key partners | | * Document analysis * Interviews | |
| * Has UNDP worked effectively with partners to deliver on this current initiative? | | * Examples of supported partnerships * Specific activities conducted to support the development of cooperative arrangements between partners * Types/quality of partnership cooperation methods utilized | * Progress reports * Project staff * Other UN and development partners * Key stakeholders | | * Document analysis * Interviews | |
| * How effective has UNDP been in partnering with civil society (where applicable) and the private sector to promote evidence-based service delivery to the country? | | * Number of CSOs engaged in planned activities * Number of private sector partners positively engaged in planned activities | * Project staff * CSOs * Private sector | | * Document analysis * Interviews | |
| **Cross Cutting Issues: To what extent were cross cutting issues taken into consideration in design, implementation and monitoring of the project?** | | | | | | | | |
| How was gender mainstreamed into the design, implementation and monitoring of the project? | | * To what extent has gender been addressed in the design, implementation and monitoring of programme interventions? * Is gender marker data assigned to this project representative of reality? | | * Gender sensitivity of surveys undertaken * Gender marker data * Sex-disaggregated data | * Project document * Progress reports * Data collected throughout the evaluation * Project staff * Partners * NGOs | | * Data analysis * Interviews | |
|  | | * How were gender issues implemented as a cross-cutting theme? * Did the project give sufficient attention to promote gender equality and gender-sensitivity? | | * Gender issues identified * Review of project documents undertaken through a gender lens * Trainings on gender mainstreaming | * Project document * Progress reports * Project staff * Key stakeholders * NGOs * Partners | | * Document review * Interviews | |
|  | | * To what extent did the project pay attention to effects on marginalized, vulnerable and hard-to-reach groups | | * Marginalized and vulnerable groups identified | * Project document * Progress reports * Project staff * Data collected throughout the evaluation * Key stakeholders * NGOs * Partners | | * Document review * Interviews | |
|  | | * To what extent was the project informed by human rights treaties and instruments? | | * Human rights treaties and instruments identified and applicable | * Project document * Project staff * Key stakeholders * NGOs * Partners * Other UN agencies | | * Document review * Interviews | |
|  | | * To what extent did the project identify the relevant human rights claims and obligations? | | * Human rights claims and obligations identified | * Project document * Data collected throughout the evaluation * Project staff * Key stakeholders * NGOs * Partners | | * Document review * Interview | |
|  | | * How were gaps identified in the capacity of rights-holder to claim their rights, and of duty-bearers to fulfill their obligations, including an analysis of gender and marginalized and vulnerable groups, and how the design and implementation of the project addressed these gaps? | | * Gender gap analysis undertaken * Other marginalized and vulnerable groups gap analysis undertaken * Number of gender gaps identified * Number of other marginalized and vulnerable groups identified | * Project document * Progress reports * Data collected throughout the evaluation * Project team * Key stakeholders * Other UN agencies * NGOs * Partners | | * Document review * Interviews | |
| How did the project consider the plight and needs of the vulnerable and disadvantaged? | | * How did the project consider the needs of the vulnerable and disadvantaged to promote social equality, for example, women, youth, and disabled persons? | | * Sex disaggregated data * Data disaggregated by relevant social categories * Special needs of vulnerable and disadvantaged identified * Number of households surveyed with vulnerable and disadvantaged person(s) | * Project document * Progress reports * Data collected throughout the evaluation * Project staff * Key stakeholders * NGOs * Partners | | * Document analysis * Interviews | |

# ANNEX IV: LIST OF STAKEHOLDERS INTERVIEWED FOR THIS EVALUATION

|  |  |
| --- | --- |
| **Name** | **Institution** |
| Abdybai Djalobaev | Ministry of Agriculture |
| Aliyev Altynbek | Head of Orozbekov LSG (AO) of Kadamjai district of Batken region |
| Asamidinov Aidarali | Representative of the Kadamzhay District Department of Agrarian Development |
| Erkin Kasybekov | ARR |
| Erkin Kozhoev | National Union of the Water Users Associations of the Kyrgyz Republic |
| Gaparov Shailoobek | Head of Samarkandek LSG of Batken district of Batken region |
| Imaralieva Batma | Representative of the Plenipotentiary Representation of the President of the Kyrgyz Republic in Batken region (PRP KR) |
| Karazakov Amirbek | Director of WUA “Cake Gul Tolkunu” |
| Kenzhebaev Isamidin | Representative of the Leilek District Department of Agrarian Development |
| Kichibaev Haitaly | Director of the WUA "Ohna Kaiyndy" |
| Kozibaev Akylbek | Representative of the Kadamjai DDWR |
| Lira Zholdubaeva | CCDRM Team Leader |
| Monica Rijal | Deputy Resident Representative |
| Mr. Musaev |  |
| Ruslan Umaraliev | **WFP** |
| Saparov Kurban | Representative of the Leilek district Department of Water Resources (DDWR) |
| Sherbet Nurjanova | Programme Associate |
| Zhunusov Akmatali | Representative of the design organization LLC "KN TEN" |
| Zhyldyz Uzakbaeva | UNDP Batken project coordinator |
| Черникова Татьяна | Kyrgyzhydromet |

# ANNEX V: ETHICAL CONSIDERATIONS

This evaluation was conducted in accordance with the principles outlined in the UNEG ‘Ethical Guidelines for Evaluation’. The consultant has safeguarded 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 consultant has also ensured security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information knowledge and data gathered in the evaluation process is solely used for the evaluation and not for other uses with the express authorization of UNDP and partners.

# ANNEX VI: LIST OF BENEFICIARIES

| ***No.*** | ***District*** | ***AO*** | ***Village*** | ***Full Name*** | ***Male (M)/Female (F)*** | ***Area in ha for DIS*** |
| --- | --- | --- | --- | --- | --- | --- |
| ***2020 (completed)*** | | | | | | |
|  | Kadamzhai | Markaz | Kok Talaa | Nurudinov Arzymamat | M | 1,2 |
|  | Kadamzhai | Markaz | Kok Talaa | Ermatov Ulanbek | M | 1 |
|  | Kadamzhai | Markaz | Markaz | Rakhmanov Faizulla | F | 4 |
|  | Kadamzhai | Orozbekov | Okhna | Akmatov Nurbai | M | 1,2 |
|  | Kadamzhai | Orozbekov | Kyzyl mazar plot | Mazaiitov Kurmanbek | M | 3,2 |
|  | Kadamzhai | Orozbekov | Kyzyl mazar plot | Alibaeva Mirgul / Bakirov Abdykadyr | F/M | 1,2 |
|  | Kadamzhai | Orozbekov | Kyzyl mazar plot | Imaraliev Erseiit | M | 3,7 |
|  | Kadamzhai | Orozbekov | Kyzyl mazar plot | Ergesheva Matluiba / Ergeshov Eshkozu | F/M | 1,2 |
|  | Kadamzhai | Orozbekov | Kyzyl mazar plot | Egemberdieva Tolkunai / Kichibaev Khait Ali | F/M | 2 |
|  | Kadamzhai | Orozbekov | Kyzyl mazar plot | Aliev Adylbek | M | 2 |
|  | Kadamzhai | Alga | Jany Chek | Akbarov Sheraly | M | 10 |
|  | Kadamzhai | Alga | Jany Chek | Nazarova Kaliyakan / Nazarov Baralbai | F/M | 2 |
|  | Kadamzhai | Alga | Jany Chek | Ikramov Murat | M | 3 |
|  | Batken | Tort Gul | Chon Kara | Jamilov Davladyar | M | 4 |
|  | Batken | Tort Gul | Chon Talaa | Kasymov Dastan | M | 3 |
|  | Batken | Samarkandek | Pasky Aryk | Kojoev Ajibek | M | 1,5 |
|  | Batken | Samarkandek | Jany Bak | Ysmanov Nurdibai | M | 2 |
|  | Batken | Samarkandek | Jany Bak | Boronov Kurmanbek | M | 1 |
|  | Batken | Samarkandek | Jany Bak | Tashpolotov Suiunbai | M | 0,8 |
|  | Batken | Samarkandek | Jany Bak | Kalbaev Asylbek | M | 1 |
|  | Batken | Samarkandek | Jany Bak | Tashpolotov Suiunbai | M | 1,5 |
|  | Batken | Samarkandek | Jany Bak | Boronov Khamidbai | M | 1 |
|  | Leilek | Ak Suu | Jenish | Bazarov Dyikanbai | M | 1,2 |
|  | Leilek | Ak Suu | Jenish | Abdinazarov Abdinazar | M | 0,6 |
|  | Leilek | Ak Suu | Jenish | Babaev Babur | M | 0,6 |
|  | Leilek | Ak Suu | Jenish | Khudoyarov Jakypbek | M | 0,72 |
|  | Leilek | Ak Suu | Chouinchu | Maatmuratov Bakhodir | M | 1 |
|  | Leilek | Ak Suu | Alga | Shamshimamatov Alisher | M | 2,17 |
|  | Leilek | Ak Suu | Ak Suu | Gapirov Abdibakir | M | 1 |
|  | Leilek | Ak Suu | Suu bashy | Jumabaev Yrysbek | M | 0,3 |
|  | Leilek | Ak Suu | Ak Suu | Khalmuratov Seiit | M | 1,5 |
|  | Leilek | Ak Suu | Ak Suu | Toichieva Farogat | F | 0,32 |
|  | Leilek | Ak Suu | Ak Suu | Samatov Abdulla | M | 0,5 |
|  | Leilek | Ak Suu | Jazgan | Gapirov Muktar | M | 0,8 |
|  | Leilek | Kulundu | Internatcional | Myrzabek uluu Bek | M | 0,6 |
|  | Leilek | Kulundu | Internatcional | Narkozuev Dosmat | M | 2,3 |
|  | Leilek | Kulundu | Internatcional | Turatova Aigul / Arzanov Adraim | F/M | 4,05 |
|  | Leilek | Kulundu | Kulundu | Japarov Takhridin | M | 10 |
|  | Leilek | Kulundu | Kulundu | Orozaliev Nyshanbai | M | 1,2 |
|  | Leilek | Kulundu | Razzakov | Pattaeva Totu / Pattaev Makhamat | F/M | 2 |
|  |  |  |  | **Total 2020:** | **F- 8**  **M - 38**  **F+M = 46** | **82,36** |
| **2021 (completed)** | | | | | | |
| 1 | Leilek | Kulundu | Kulundu | Satarova Saltanat | F | 2,5 |
| 2 | Leilek | Kulundu | Kulundu | Sheralieva Farida | F | 2 |
| 3 | Leilek | Kulundu | Kulundu | Mahkamova Salia | F | 1 |
| 4 | Leilek | Kulundu | Kulundu | Ibragimova Aksana | F | 2 |
| 5 | Leilek | Kulundu | Kulundu /Bulak Bashi | Amanova Orizgul | F | 1,3 |
| 6 | Leilek | Aksuu | Alga | Hudaiarov Bababek | M | 0,6 |
| 7 | Leilek | Aksuu | Aksuu | Samatov Abdugapar | M | 1,2 |
| 8 | Batken | Samarkandek | Samarkandek | Aitbaeva Bahap | M | 0,3 |
| 9 | Batken | Samarkandek | Samarkandek | Salihova Malika | M | 2,5 |
| 10 | Batken | Tort Gul | Chon Kара | Ibrahimov Seitaly | M | 4,7 |
| 11 | Kadamjai | Orozbekov | Kuldu | Abdullaev Bahadyr | M | 1 |
| 12 | Kadamjai | Orozbekov | Kara Kol | Matisaev Murzakul | M | 0,5 |
| 13 | Kadamjai | Orozbekov | Kosh Dobo | Oktombaev Nurlan | M | 0,7 |
| 14 | Kadamjai | Orozbekov | Ondurush | Ergeshev Bahtiar | M | 1 |
| 15 | Kadamjai | Orozbekov | Kuldu | Kojoiarov Mamasadyk | M | 1 |
| 16 | Kadamjai | Orozbekov | Sary Tala | Abdivaieva Jamilia | M | 1,3 |
| 17 | Kadamjai | Orozbekov | Ondurush | Kubatov Nurmamat | M | 0,5 |
| 18 | Kadamjai | Markaz | Chukur | Baimurzaeva Gulnara | F | 3,5 |
| 19 | Kadamjai | Markaz | Kok Tala | Kalykova Batma | F | 1 |
| 20 | Kadamjai | Markaz | Kok Tala | Nurudinov Arzymamat | M | 0,5 |
| 21 | Kadamjai | Markaz | Jany Abad | Satarov Abyt | M | 1 |
| 22 | Kadamjai | Markaz | Kok Tala | Nurudinov Ajimamat | M | 0,9 |
| **Total 2021:** | | | | | **F-7**  **M-15**  **F+M=22** | **32** |
| **TOTAL 2020-2021** | | | | | **F- 15**  **M – 53**  **F+M=68** | **114** |

| ***No.*** | | ***District*** | | ***AO*** | | ***Village*** | ***Full Name*** | | ***Male (M)/Female (F)*** | | ***Area in ha for DIS*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Leilek | | Toguz Bulak | | Aibike | | | Nabi u. Aidalarlii | | M | 0,92 |
| 2 | Leilek | | Toguz Bulak | | Min Jygach | | | Amiraev Adbyraup | | M | 0,5 |
| 3 | Leilek | | Toguz Bulak | | Aibike | | | Abdullaeva Abdali | | M | 0,66 |
| 4 | Leilek | | Toguz Bulak | | Aibike | | | Nuraliev Akjol/ Omat | | M | 0,5 |
| 5 | Leilek | | Toguz Bulak | | Aibike | | | Jorobaev Ysman /Mamatkulov Ruslanbek | | M | 0,5 |
| 6 | Leilek | | Toguz Bulak | | Aibike | | | Tagaev Mahmud /Abdygapar u. Busurman -Kul | | M | 0,7 |
| 7 | Leilek | | Toguz Bulak | | Min Jygach | | | Jamurzaev Savyrjan /Japarov Alimjan | | M | 1 |
| 8 | Leilek | | Meria c.Isfana | | Isfana | | | Ovganov Baktybek | | M | 1 |
| 9 | Leilek | | Meria c.Isfana | | Isfana | | | Jalalov Mirbek | | M | 2,2 |
| 10 | Leilek | | Margun | | Margun | | | Momunov Abdygany /Akimov Tashtemir | | M | 5 |
| 11 | Leilek | | Margun | | Margun | | | Boobekov Jyrgal | | M | 1 |
| 12 | Leilek | | Margun | | Margun | | | Cheerbekov Beknazar | | M | 1 |
| 13 | Leilek | | Margun | | Margun | | | Shapakov Arystanbek | | M | 0,5 |
| 14 | Batken | | Samarkandek | | Jany bak | | | Dyikanov Omurbek | | M | 1 |
| 15 | Batken | | Samarkandek | | Jany bak | | | Ganiev Aijigit | | M | 1 |
| 16 | Batken | | Samarkandek | | Samarkandek | | | Alieva Saidakan | | F | 1 |
| 17 | Batken | | Samarkandek | | Jany bak | | | Maraimov Orozbai | | M | 1 |
| 18 | Batken | | Meria c.Batken | | Batken | | | Orozaliev Manas | | M | 0,4 |
| 19 | Batken | | Meria c.Batken | | Batken | | | Rahmatov Timur | | M | 2 |
| 20 | Batken | | Meria c.Batken | | Bujum | | | Turanov Ergesh | | M | 1,4 |
| 21 | Kadamjai | | Orozbekov | | Cuduk | | | Matisaev Sattar/Usenov Mamazair | | M | 0,6 |
| 22 | Kadamjai | | Orozbekov | | Anarkulov | | | Temirov Almazbek | | M | 0,6 |
| 23 | Kadamjai | | Orozbekov | | Orozbekov | | | Ergeshev Mamasadyk | | M | 1,75 |
| 24 | Kadamjai | | Orozbekov | | Cara-Cechuu | | | Kubatov Ismail | | M | 2 |
| 25 | Kadamjai | | Orozbekov | | Uchkun | | | Ergeshev Bahtiar | | M | 2 |
| 26 | Kadamjai | | Orozbekov | | Uchkun | | | Kasymov Bekjan | | M | 1 |
| 27 | Kadamjai | | Orozbekov | | Kuduk | | | Egemberdieva Tolkunai(Хайтали) | | F | 1,6 |
| 28 | Kadamjai | | Orozbekov | | Kuldu | | | Matisaev Sabirbai | | M | 1,7 |
| 29 | Kadamjai | | Markaz | | Kok Taala | | | Atipov Askarbek | | M | 1 |
| 30 | Kadamjai | | Markaz | | Kok Taala | | | Nuridinova Begimai | | F | 1 |
| 31 | Kadamjai | | Markaz | | Kok Taala | | | Kalykov Mamatisak | | M | 0,88 |
| 32 | Kadamjai | | Markaz | | Kok Taala | | | Kaarov Kanybek | | M | 1,6 |
| 33 | Kadamjai | | Markaz | | Sarybai | | | Amiraev Kanybek | | M | 2 |
| 34 | Kadamjai | | Markaz | | Markaz | | | Kaziev Nasyr | | M | 6 |
| 35 | Kadamjai | | Markaz | | Markaz | | | Nurutdinov Abdujalil | | M | 2 |
| 36 | Kadamjai | | Alga | | Alga | | | Satarov Kasymjan | | M | 4 |
| 37 | Kadamjai | | Kyrgyz Kishtak | | Kyrgyz Kishtak | | | Mashrapov Kairatbek | | M | 1 |
| 38 | Kadamjai | | Kyrgyz Kishtak | | Kyrgyz Kishtak | | | Mamatov Bahodyr/Myrzakozuev Abytjan | | M | 2,6 |
| **Total 2022:** | | | | | | | | | | **F-3**  **M-35 F+M=38** | **56,61** |

# ANNEX VII: ACHIEVEMENT OF PROJECT RESULTS

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Intended Outcome as stated in the UNDAF/Country [or Global/Regional] Programme Results and Resource Framework:**  Priority III. Environment, climate change, and disaster risk management.  Outcome 3: By 2022, communities and institutions are more resilient to climate and disaster risks and are engaged in sustainable and inclusive natural resource management and risk-informed development. | | | | | | | | | |
| **Outcome indicators as stated in the Country Programme [or Global/Regional] Results and Resources Framework, including baseline and targets:**  Outcome 3: By 2022, communities and institutions are more resilient to climate and disaster risks and are engaged in sustainable and inclusive natural resource management and risk-informed development. | | | | | | | | | |
| **Applicable Output(s) from the UNDP Strategic Plan:**  Output 3.1. Policy, legal and institutional systems enhanced to apply innovative climate change mitigation and adaptation practices across the country.  Output 3.3. Innovative and smart solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste, for better livelihoods and employment, with focus on women and youth. | | | | | | | | | |
| **Project title and Atlas Project Number:** Strengthening climate resilience of the Batken province of the Kyrgyz Republic through introduction of climate smart irrigation and mudflow protection measures. | | | | | | | | | |
| **Expected outputs** | **Output indicators** | **Data source** | **Baseline** | | **Value for the previous year if different from baseline**  **Target for the reported year** | | | **Data collection methods &risks** | **Actual value for the reported year** |
| **Value** | **Year** | **2019** | **2020** | **Final** |  |  |
| **Output 1**  Improved climate information and local capacity for climate-resilient irrigation water management | ***Activity Result 1.1***  *# Expanded agrometeorological observation network*  ***Indicator 1.1****.#of operational units of hydrometeorological observation net* | 1. *Report of the Selection Commission.* 2. *Technical specification and tender documentation* 3. *Financial and handing over documents* 4. *Documentation on post project operation and maintenance* | 2 meteo station,  1 agro meteo post and  2 hydro posts | 2018 | 2 (AWS) | 2 (AWS) | *9 units* | 1. Project monitoring visits and oversight 2. Regular UNDP project reporting documentation   *No risk* | 2 meteo station,  1 agro meteo post and  2 hydro posts  ***4 AWS installation contract issued with CAE and 4 field site plots ready for their installation by 9 September 2022*** |
| ***Activity result 1.2.*** *Improved climate information products communicated to farmers’ communes*  ***Indicator 1.2***  *# of climate related informational products developed for farmers* | *1. Analysis of the information demand among the farmers*  *2. Drafted Information products*  *3.Publications of ten-day weather agrometeo forecasts, and phenological forecasts of crops communicated to farmers* | 5-days meteo forecast and  Phenological forecasts sent for the state administrations | 2018 | *10-day weather agrometeo forecasts, and phenological forecasts of the main agricultural crops, and seasonal forecasts on rives’ runoff availability for irrigation* | *10-day weather agrometeo forecasts, and phenological forecasts of the main agricultural crops, and seasonal forecasts on rives’ runoff availability for irrigation* | *10-day weather agrometeo forecasts, and phenological forecasts of the main agricultural crops, and seasonal forecasts on rives’ runoff availability for irrigation* | 1. Project monitoring visits and oversights 2. Regular UNDP project reporting documentation 3. Stakeholders feedback   *No risk* | * 7-days weather agrometeo forecasts sent for the state administrations * System for a seasonal forecast for rice to the Batken, Osh, and Djalal -Abad oblasts established and ready to be sent to farmers * Agroclimatic resources handbook develop with an overview of the best available methodologies in the region (CIS countries) to calculate the necessary parameters for inclusion into it, to develop calculation templates on the basis of the specialized agro-climatic and climatic parameter, building the capacity of Kyrgyzhydromet staff in specialized calculations and interpretation of results for potential users, awareness-rasing of key stakeholders to improve agro-climatic meteorological forecasting (<https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/05/_-_-_--_-_-_-_-_---.html> ). The project edited and translated the reference book and disseminate it on local and national levels during September 2021 (<https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/09/batken-irrigation.html> ) * **Seasonal forecasts on rives’ runoff in Batken oblast are under development (international expert hired)** |
|  | ***Activity 1.3.*** *Development and implementation of training programmes for LSG and WUA and other relevant local stakeholders*  ***Indicator 1.3.a.*** *Availability three-module training programme*  ***Indicator 1.3.b.*** *# of organized training events and local participants involved disaggregated by gender (30% of trained – women)* | *1. Training needs assessments and modules developed*  *2. Trainings reports with lists of participants*  *3. Filled in participants’ evaluation forms.*  *3. BTOR of UNDP monitoring staff* | 0 | 2018 | 2 Modules on water efficient irrigation technologies and Climate resilience and information products  - 160 stakeholders trained | 1 modules on Climate risks reduction  - 70 stakeholders trained | 5 trainings modules   * 230 stakeholders trained | 1. Project monitoring visits and oversights  2. Regular UNDP project reporting documentation  3. Stakeholders feedback  *No risk* | During 2020 the multi-modular curriculum developed on:  A. Use of agrometeorological information and forecasts to reduce climate risks in agriculture.  - 98 stakeholders trained  B. Emergencies related to climate change, protection of the population and irrigation infrastructure.  -92 stakeholders trained  C. Special training module (with practical exercises on a demonstration field) on smart irrigation systems for beneficiaries from the pilot communities in Batken province.  - 124 stakeholders trained  Total: 314 stakeholders trained (30 % were women)  Based on the work implementing by supplier on DIS installation in 2021 completed producing the video -course on water saving irrigation technologies and DIS for future usage by Water Users Associations on national level (link on video course <https://www.youtube.com/watch?v=Z5SAf1uy7B8> ). It was presented on round table in Batken province for water users associations and water governance representatives in Batken province - <https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/09/batken-irrigation.html> .  Total beneficiaries in 2021: 22 stakeholders |
|  | ***Activity 1.4.:*** *Climate related research to complete relevant climate information gap*  ***Indicator 1.4****: # of new researches on climate change in Batken* | *1. Research paper “Climate change and food security: Case study of the Batken Province”*  *2. Research paper “Climate aspects of gender equality in local communes of the Batken Province”* | 0 | 2018 | 1 | 1 | 2 | 1. Project reporting documentation   No risks | 2  Project prepared of two studies, "Climate Change and Food Security: Case Studies in Batken Province'' to determine how climate change affects food security and agriculture, with recommendations for appropriate actions to reduce the adverse impact of climate change on food security and agriculture in Batken province and “Climate Change and Gender in Batken Province" for subsequent elimination of barriers that prevent women in general and women farmers from benefiting from innovative climate change adaptation measures. In September the project these two studies edited, translated, and presented on Batken province level with invitation of national relevant bodies with using off/online mode (<https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/10/batken-seminar.html>). All studies are uploaded to the following link - <https://bit.ly/396Qi99> |
| **Output 2**  Expanded application of water-efficient technologies and protection of irrigation systems. | ***Activity 2.1.*** *Identification of sites and locations for the introduction of water -efficient irrigation technologies in the target communities*  ***Indicator 2.1*** *# of identified sites for the deployment of water-efficient irrigation technologies in the target communities* | *1. Report of the Selection Commission.*  *2. UNDP staff BTOR* | 0 | 2018 | Sites in minimum 9 local communities |  | Minimum 9 sites | * Project monitoring visits and oversight * Regular UNDP project reporting documentation   No risks | * 62 sites identified during 2020-2021 * 38 sites identified during 2022 |
| *…* | ***Activity 2.2.*** *Introduction of water efficient irrigation technologies*  ***Indicator 2.2*** *# of sites with installed water-efficient irrigation technologies.* | *1. Technical specification and tender documentation*  *2. Financial and handing over documents*  *3. Documentation on post project operation and maintenance* | 0 | 2018 | *Minimum 9* | *Minimum 6* | *Minimum 15* | * *Project monitoring visits and oversight* * *Regular UNDP project reporting documentation*   *No risks* | * *62 sites with installed water efficient irrigation technologies during 2020-2021* * *38* *sites will install water efficient irrigation technologies during 2022 (tender announced)* |
|  | ***Activity 2.3.*** *Identification of sites for rehabilitation and protection of on-farm irrigation objects*  ***Indicator 2.3.*** *# of sites identified for rehabilitation and protection of on-farm irrigation objects.* | *1. Report of the Selection Commission.*  *2. UNDP staff BTOR* | 0 | 2018 | *Sites in minimum 3 local communes* |  | *Minimum 3 sites* | * *Project monitoring visits and oversight* * *Regular UNDP project reporting documentation*   *No risks* | *7 sites identified* |
|  | ***Activity 2.4.*** *Rehabilitation and protection of on-farm irrigation objects*  ***Indicator 2.4****. # of rehabilitated and protected of on-farm irrigation facilities* | *1. Technical specification and tender documentation*  *2. Financial and handing over documents*  *3. Documentation on post project operation and maintenance* | 0 | 2018 | *Minimum 3* | *Minimum 2* | *Minimum 5* | * *Project monitoring visits and oversight* * *Regular UNDP project reporting documentation*   *No risks* | *7 sites rehabilitated and protected of on-farm irrigation facilities*  *Procurement water intake equipment for the Kulundu LSG (tender announced)*  *The use of groundwater for irrigation of farms of the border Samarkendek LSG*  *(LoA under signing)*  *Develop a program to improve water supply to the population under conditions of increasing drought (ToR under finalization depends on results of UNDP study and on-going activities on activity 1.2.)* |
| **Output 3**  Increased awareness and dissemination of best practices to reduce climate vulnerability of local communities. | ***Activity 3.1.*** *Development of Project’s communication strategy, gender mainstreaming plan and information products*  ***Indicator 3.1.*** *Availability of project communication, gender documents and informational products* | *1. Project communication strategy*  *2. Project gender mainstreaming plan*  *3. Leaflet about the project in 3 languages* | 0 | 2018 | *3* |  | *3* | * *Regular UNDP project reporting documentation* * *Publications and links archiving*   *No risks* | *3* |
| ***Activity 3.2.*** *Carrying out of information campaign “Province-District*  ***Indicator 3.2.*** *# of publication in press, TV and social media.* | *1. Inception workshop report*  *2. Articles in press.*  *3. TV and radio programmes*  *4. Social media posts* | 0 | 2018 | *Minimum 3 publications in press and 4 in social media and 1 TV program* | *Minimum 2 publications in press and 3 in social media and 2 TV programs* | *15 publications in media* | * *Inception workshop report* * *Articles in press* * *TV and radio programmes* * *Social and media posts* | *12*  *Final publication*  *Final conference*  *Media coverage for 4 AWS installation*  *Media coverage of DIS and water intake construction*  *Media coverage of Samarkandek water pumping* |

1. Data retrieved from the National Statistical Committee of the Kyrgyz Republic (link [here](http://www.stat.kg/en/opendata/category/120/)). [↑](#footnote-ref-1)
2. The terms “province”, “region” and “oblast” are used interchangeably in this report. [↑](#footnote-ref-2)
3. [Link here.](https://unfccc.int/sites/default/files/resource/NC3_Kyrgyzstan_English_24Jan2017_0.pdf) [↑](#footnote-ref-3)
4. Data retrieved from the National Statistical Committee of the Kyrgyz Republic database (link [here](http://www.stat.kg/ru/gendernaya-statistika/naselenie/)). [↑](#footnote-ref-4)
5. [Link here.](https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm) [↑](#footnote-ref-5)
6. [Link here](http://web.undp.org/evaluation/guideline/documents/PDF/UNDP_Evaluation_Guidelines.pdf). [↑](#footnote-ref-6)
7. [Link here.](http://www.president.kg/ru/sobytiya/12774_utverghdena_nacionalnaya_strategiya_razvitiya_kirgizskoy_respubliki_na_2018_2040_godi) [↑](#footnote-ref-7)
8. [Link here.](http://www.president.kg/ru/sobytiya/20898_prinyata_nacionalnaya_programma_razvitiya_kirgizskoy_respubliki_do2026_goda) [↑](#footnote-ref-8)
9. [Link here.](http://cbd.minjust.gov.kg/act/view/ru-ru/99907) [↑](#footnote-ref-9)
10. [Link here.](http://cbd.minjust.gov.kg/act/view/ru-ru/100162?cl=ru-ru) [↑](#footnote-ref-10)
11. [Link here.](http://cbd.minjust.gov.kg/act/view/ru-ru/11990) [↑](#footnote-ref-11)
12. This conceptual long-term strategic document was approved in October 2018. [↑](#footnote-ref-12)
13. Support for this activity is included in another UNDP project, named “GCF NAP project”. [↑](#footnote-ref-13)
14. Local communities in the Batken region selected by the project. [↑](#footnote-ref-14)
15. Within the Third National Communication of the Kyrgyz Republic under the UNFCCC, a detailed vulnerability assessment of sectors and territories was carried out, which showed that the Batken Province of the Kyrgyz Republic, located in the south-western part of the country, represents the most vulnerable area to climate change in the Kyrgyz Republic. [↑](#footnote-ref-15)
16. The municipalities were Tort -Gul AO and Samarkandek AO of Batken district, Aksuu AO and Kulundu AO of Leilek district, Alga AO, Markaz AO and Orozbekov AO of Kadamjai district. [↑](#footnote-ref-16)
17. Batken district: 4 in Tort-Gul AO, 8 in Samarkandek AO; Leilek district: 15 in Aksuu AO, 5 in Kulundu AO; Kadamzhai district: 8 in Alga AO, 5 in Markaz AO, 7 in Orozbekov AO. [↑](#footnote-ref-17)
18. More information about the Trust Fund can be found [here](http://unrussia.ru/sites/default/files/Trust%20Fund%20Agreement%20Russia-UNDP%20ENG.pdf). [↑](#footnote-ref-18)
19. The Russian Federation and the Kyrgyz Republic are parties to the "Agreement on interaction in the field of hydrometeorology of the CIS member states" as of February 8, 1992 (taking into account the Protocol on Amendments, which entered into force on December 20, 2017). [↑](#footnote-ref-19)
20. The Federal Service for Hydrometeorology and Environmental Monitoring (Roshydromet) is a federal executive body responsible for managing government property and providing government services in hydrometeorology and related areas, monitoring the environment and environmental pollution, and exercising government oversight of activities influencing hydrometeorological and other geophysical processes. [↑](#footnote-ref-20)
21. More information on the training programme can be found [here](https://www.undp.org/ru/kyrgyzstan/press-releases/%D1%81%D0%BE%D1%82%D1%80%D1%83%D0%B4%D0%BD%D0%B8%D0%BA%D0%B8-%D0%BA%D1%8B%D1%80%D0%B3%D1%8B%D0%B7%D0%B3%D0%B8%D0%B4%D1%80%D0%BE%D0%BC%D0%B5%D1%82%D0%B0-%D0%BF%D1%80%D0%BE%D1%88%D0%BB%D0%B8-%D0%BD%D0%B5%D0%B4%D0%B5%D0%BB%D1%8C%D0%BD%D0%BE%D0%B5-%D0%BE%D0%B1%D1%83%D1%87%D0%B5%D0%BD%D0%B8%D0%B5-%D0%BD%D0%BE%D0%B2%D0%BE%D0%B9-%D0%B8%D0%BD%D1%84%D0%BE%D1%80%D0%BC%D0%B0%D1%86%D0%B8%D0%BE%D0%BD%D0%BD%D0%BE-%D0%BF%D1%80%D0%BE%D0%B3%D0%BD%D0%BE%D1%81%D1%82%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%BE%D0%B9-%D1%81%D0%B8%D1%81%D1%82%D0%B5%D0%BC%D0%B5). [↑](#footnote-ref-21)
22. Link [here](https://www.undp.org/ru/kyrgyzstan/press-releases/%D1%81%D0%BE%D1%81%D1%82%D0%BE%D1%8F%D0%BB%D0%B0%D1%81%D1%8C-%D0%BF%D1%80%D0%B5%D0%B7%D0%B5%D0%BD%D1%82%D0%B0%D1%86%D0%B8%D1%8F-%D1%81%D0%BF%D1%80%D0%B0%D0%B2%D0%BE%D1%87%D0%BD%D0%B8%D0%BA%D0%B0-%C2%AB%D0%B0%D0%B3%D1%80%D0%BE%D0%BA%D0%BB%D0%B8%D0%BC%D0%B0%D1%82%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%B8%D0%B5-%D1%80%D0%B5%D1%81%D1%83%D1%80%D1%81%D1%8B-%D0%B1%D0%B0%D1%82%D0%BA%D0%B5%D0%BD%D1%81%D0%BA%D0%BE%D0%B9-%D0%BE%D0%B1%C2%AC%D0%BB%D0%B0%D1%81%D1%82%D0%B8-%D0%BA%D1%8B%D1%80%D0%B3%D1%8B%D0%B7%D1%81%D0%BA%D0%BE%D0%B9-%D1%80%D0%B5%D1%81%D0%BF%D1%83%D0%B1%D0%BB%D0%B8%D0%BA%D0%B8%C2%BB). [↑](#footnote-ref-22)
23. This cooperation took place in the context of the WB project ““Central Asian Hydrometeorology Modernization Project””. [↑](#footnote-ref-23)
24. At the time of the project design, USAID was implementing its agriculture development project Agro-Horizon, introducing best agriculture crops farming and agriculture commodities processing practices in the Batken region. [↑](#footnote-ref-24)
25. ADB was expected to start a project on the protection of irrigation water infrastructure from climate hazards. [↑](#footnote-ref-25)
26. The installation of weather stations is expected to be completed by end of September by CAE Ltd, an Italian company. [↑](#footnote-ref-26)
27. Link [here](https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/09/kyrgyz-hydromet.html). [↑](#footnote-ref-27)
28. Link [here](https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/05/_-_-_--_-_-_-_-_---.html). [↑](#footnote-ref-28)
29. Link [here](https://www.youtube.com/watch?v=Z5SAf1uy7B8). [↑](#footnote-ref-29)
30. All studies are uploaded in this [link](https://bit.ly/396Qi99). [↑](#footnote-ref-30)
31. Link [here](https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/05/_-_-_--_-_-_-_-_---.html). [↑](#footnote-ref-31)
32. The locations were the following: Batken district: 3 in Tort-Gul AO, 9 in Samarkandek AO; Leilek district: 14 in Aksuu AO, 11 in Kulundu AO; Kadamzhai district: 3 in Alga AO, 8 in Markaz AO, 14 in Orozbekov AO. [↑](#footnote-ref-32)
33. Sub-district with elected government sometimes referred to Aiyl Aimak (or Aiyl Okmotu - elected government in Aiyl Okrug). [↑](#footnote-ref-33)
34. Tort-Gul AO and Samarkandek AO of Batken district, Aksuu AO and Kulundu AO of Leilek district, Alga AO, Markaz AO, and Orozbekov AO of Kadamjai district. [↑](#footnote-ref-34)
35. This work was carried out under the “Green Projects” programme, with the manual labor of local residents involved in the planting of trees paid in the form of food by WFP's program. [↑](#footnote-ref-35)
36. Link [here](https://youtu.be/GlhPrJloFL8). [↑](#footnote-ref-36)
37. Link [here](https://www.youtube.com/watch?v=GlhPrJloFL8&t=5s). [↑](#footnote-ref-37)
38. Link [here](https://youtu.be/0YlSWA_0jP0). [↑](#footnote-ref-38)
39. Link [here](https://www.youtube.com/watch?v=NTTo89UnslM). [↑](#footnote-ref-39)
40. Link [here](https://youtu.be/EUgb83smY6Q%20and%20https:/youtu.be/SGcM6rRv-z0). [↑](#footnote-ref-40)
41. Link [here](https://www.youtube.com/watch?v=Z5SAf1uy7B8). [↑](#footnote-ref-41)
42. Links [here](https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/09/batken-irrigation.html) and [here](https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/10/batken-seminar.html). [↑](#footnote-ref-42)
43. Without detracting from the merits of telecommuting mode in terms of cost reduction and the need to travel, KyrgyzHydromet staff stated that they prefer physical meetings with Roshydromet, since working with the specific software required attention to details. [↑](#footnote-ref-43)
44. A summary of the events associated with the political instability of this period can be found [here](https://constitutionnet.org/news/kyrgyzstans-third-revolution-and-road-another-victors-constitution). [↑](#footnote-ref-44)
45. Human Rights Watch report about the conflict [here](https://www.hrw.org/news/2021/05/21/after-kyrgyzstan-tajikistan-border-conflict-time-human-rights-agenda). [↑](#footnote-ref-45)
46. Project management costs needed for monitoring extended activities for the 12-month extension period were covered by UNDP in the amount of US$ 30,000. [↑](#footnote-ref-46)
47. Link [here](https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/09/kyrgyz-hydromet.html). [↑](#footnote-ref-47)
48. Link [here](https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/05/_-_-_--_-_-_-_-_---.html). [↑](#footnote-ref-48)
49. Link [here](https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/09/batken-irrigation.html). [↑](#footnote-ref-49)
50. Link [here](https://www.youtube.com/watch?v=Z5SAf1uy7B8). [↑](#footnote-ref-50)
51. Link [here](https://www.kg.undp.org/content/kyrgyzstan/ru/home/presscenter/pressreleases/2021/09/batken-irrigation.html). [↑](#footnote-ref-51)
52. Kyrgyzhydromet is the agency for hydrometeorology under the Ministry of Emergency Situations of the Kyrgyz Republic. It was established in 1926. Kyrgyzhydromet performs the duties set out in the Law on hydrometeorological activities (adopted in 2006) and the Regulations on the Agency for Hydrometeorology (Kyrgyzhydromet) (adopted in 2010). [↑](#footnote-ref-52)
53. The Agency was established on July 30, 2019 by a decree of the Prime Minister of the Kyrgyz Republic tasked to implement the provisions of the Water Code of the Kyrgyz Republic. It took all the functions of the Department of Water Resources and Land Improvement under the Ministry of Agriculture, Food Processing and Land Improvement. The main targets of the Agency are to implement an integrated water resources management mechanism; to provide sustainable management and rational use of water resources and water management infrastructure, water supply and sanitation; to provide effective interstate cooperation in the water resources management and use; and other interstate water relations regulation. [↑](#footnote-ref-53)
54. Kyrgyzhydromet was also crucial in providing the land titles for the location of weather stations. [↑](#footnote-ref-54)
55. The vulnerability assessment was participatory – it involved local authorities, directors of Water User Associations (WUA), local, etc. [↑](#footnote-ref-55)
56. LoAs determine each party’s financial and labor contributions and work plans. HACT is UNDP’s framework for the transfer of funds to implementing partners for the implementation of project activities. [↑](#footnote-ref-56)
57. The project is titled "*Climate Services and Diversification of Climate Sensitive Livelihoods to Empower Food Insecure and Vulnerable Communities in the Kyrgyz Republic*". [↑](#footnote-ref-57)
58. Using LoAs and the HACT mechanism for transferring of funds to local partners. [↑](#footnote-ref-58)
59. Link to report [here](https://www.hrw.org/news/2021/05/21/after-kyrgyzstan-tajikistan-border-conflict-time-human-rights-agenda). [↑](#footnote-ref-59)
60. Link to report [here](https://www.usip.org/publications/2021/05/border-clash-between-kyrgyzstan-and-tajikistan-risks-spinning-out-control). [↑](#footnote-ref-60)