



ADAPTATION FUND

Project Completion Summary

In accordance with the project agreement, implementing entities are required to submit a project completion report within six (6) months after Project completion, and the final project progress report (PPR) is considered as a project completion report. While the PPRs meet technical requirements, the information is reported by year and its format is not ideal to convey the overall information and knowledge to wider and more general audiences. To supplement this, implementing entities are requested to prepare a project completion summary.

A project completion summary is intended to cover an entire project life in a reader friendly format by compiling the previously submitted single-year PPRs. It also gives implementing entities an opportunity to express and share insights from project implementation, findings, challenges etc. which may not be presented by PPRs and captured by a final evaluation report.

A project completion summary consists of narrative information (Section A) and financial information (Section B). Any other information (Section C) can be added to the report as an option. Most of the contents can be filled in by copy-and-paste from the submitted PPRs. The completion report should be no more than 20 pages (excluding annexes).



ADAPTATION FUND

Project Completion Summary

Section A: Project result and performance

1. Basic information

Title of project/programme	Adapting to Climate-Induced Threats to Food Production and Food Security in the Karnali region of Nepal
Project/Programme category	Project
Project period (if the project was granted an extension, include the original as well as the revised completion date)	26 October 2018-26 October 2022 (4 years), no extension was requested
Country	Nepal
Sector (s)	Food Security
Implementing entity name	UN World Food Programme (UN WFP)
Type of implementing entity (MIE, NIE or RIE)	Multilateral Implementing Entity (MIE)
Executing entities	Government of Nepal: Ministry of Forests and Environment (MoFE) and WFP
Amount of financing approved (USD)	\$ 9,527,160.00
Project contact(s)	Krishna Jogi, Deputy Head of Programme and Strategic Programme Manager, WFP Nepal (krishna.jogi@wfp.org)
Date of report	26 May 2023

2. Key milestones

Please refer to the overview tab in the latest PPR. For the delay in project implementation and related reasons refer to the lessons learned tab, section on “implementation and adaptive management”

Project inception	26 October 2018
Mid-term review (if applicable)	21 December 2021

Project completion	26 October 2022
Terminal evaluation	July 2023
If any, delay in implementation and reasons for delay	The project was submitted to Adaptation Fund (AF) by the Government of Nepal and WFP in August 2013, and the funding was approved by the Adaptation Fund Board in May 2015. Due to the 2015 earthquakes in Nepal which coincided with the time of project approval, a significant delay occurred in project execution after its approval. This was further exacerbated by the restructuring of state entities in Nepal following the promulgation of the new constitution in September 2015. An agreement (MoU) was finally signed between MoFE and WFP in May 2018 to start project implementation. Hence, the project officially started on 26 October 2018, following an inception workshop. Despite disruptions and challenges caused by the COVID-19 pandemic (movement restrictions for 2-3 months in 2020, 2021, and 2022), the project was successfully completed within the originally stipulated timeframe (October 2018 to October 2022) without the need for an extension.

3. Project overview and description

The Government of Nepal (GoN) received funding from the Adaptation Fund (AF) to execute a project titled “Adapting to Climate-Induced Threats to Food Production and Food Security in the Karnali region of Nepal (CAFS-Karnali)”¹. The United Nations World Food Programme (WFP) was in charge of project implementation as the Multilateral Implementing Entity (MIE) and the project was jointly executed by the Government of Nepal - the Ministry of Forests and Environment (MoFE), and WFP. It was designed to be aligned with Nepal’s Climate Change Policy and National Adaptation Programme of Action (NAPA), 2010, and later has been adjusted to align with National Climate Change Policy, 2019 and National Adaptation Plan (NAP), 2021.

The project’s goal was to increase the adaptive capacity of climate-vulnerable and food-insecure poor households through improved management of livelihood assets and natural resources in

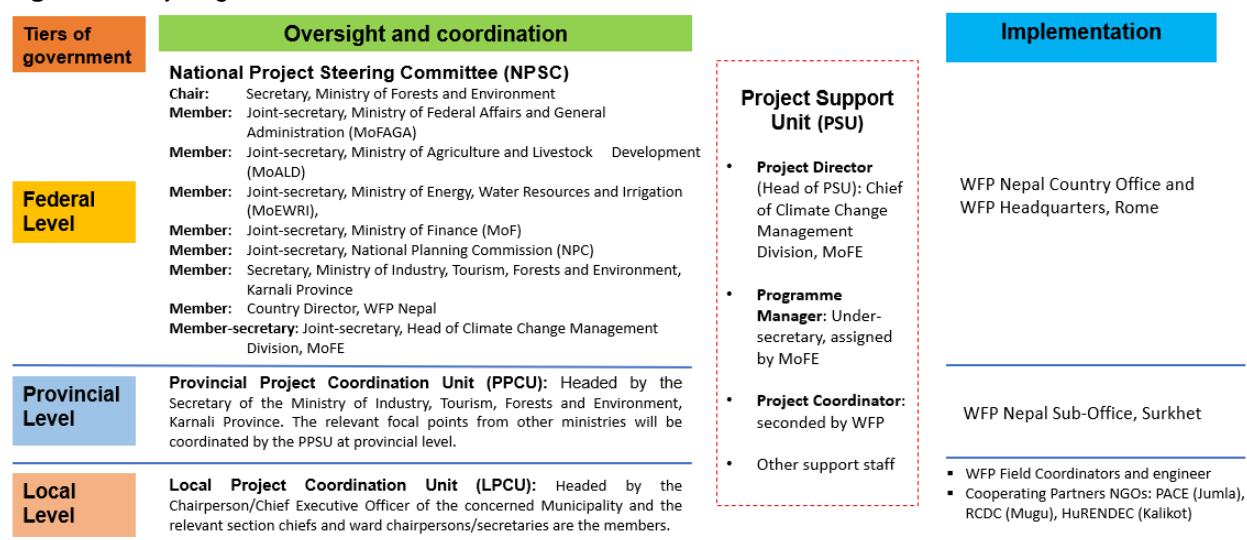
¹ The National Project Steering Committee decided to use the title of the project as Climate Change Adaptation for Food Security in Karnali and CAFS-Karnali in short form for the day-to-day operational use, as the formal title of the project is long.

Kalikot, Jumla, and Mugu districts of Karnali province. The key objectives of the project were to strengthen local capacity to identify climate risks and design adaptive strategies, diversify livelihood and strengthen food security for climate-vulnerable poor households and increase the resilience of natural systems that support livelihoods to cope with climate change-induced stresses. The project aimed to benefit approximately 10,850 households (estimated 65,800 people) in seven rural municipalities of three districts from different interventions (directly/indirectly) over the four years of the project period through two programme components: Component 1: Develop local, district, and national capacity to plan, implement and monitor adaptation and risk reduction actions; and Component 2: Build household and community resilience and increase the adaptive capacity of the climate vulnerable poor people.

The project implementation arrangements were aligned with the federal governance structure of Nepal, and as per the new institutional setup of local governments. Project activities were prioritized and reflected in the annual work plan following the agreed planning process at the national and sub-national levels. A National Project Steering Committee (NPSC), chaired by the Secretary of MoFE, was established to be chaired by the Secretary of MoFE to provide overall strategic policy guidance and coordination to the project. A Project Support Unit (PSU) was set-up within the MoFE, and headed by the Joint Secretary/Chief of the Climate Change Management Division of MoFE and supported by a Programme Manager (Under-Secretary), to facilitate and coordinate the implementation of Project activities. For provincial-level coordination of project-related activities, a Provincial Project Coordination Unit led by the Secretary of the Ministry of Industry, Tourism, Forests, and Environment was established. Similarly, at the Rural Municipality level, a Local Project Coordination Unit led by the Chief Administrative Officer of the Municipality coordinated the project activities, providing overall guidance for project planning and implementation, and ensuring multi-stakeholder engagement and coordination.

WFP had partnership agreements with competitively selected three Cooperating Partners (CPs) for implementing the project: the Rural Community Development Center (RCDC) (for Mugu), the Human Rights and Environment Development Centre (HuRENDEC) (for Kalikot), and the Partnership Aid Center (PACE Nepal) (for Jumla). WFP provided oversight and leadership to overall project implementation, monitoring, evaluation, quality assurance, in collaboration with different government institutions, private sector, etc. The governance mechanism of the project is presented in Figure below.

Figure 1. Project governance structure



The project implementation was accomplished within the originally stipulated timeframe (October 2018 to October 2022). As per the financing agreement between AF and WFP, and the implementation agreement between MoFE and WFP, the final project evaluation is currently underway through a competitively selected independent evaluation company and will be completed by June 2023. The audit of the project by an independent auditor selected through a competitive process will also be completed by June 2023.

4. Results and key outcomes

(Alignment with the Adaptation Fund core impact indicators – Number of Direct Beneficiaries reached including women; Trainings conducted including women trained, Early Warning Systems (EWS); Assets Produced, Developed, Improved, or Strengthened; Natural Assets Protected or Rehabilitated i.e., hectares of natural habitats/ meters of coastlines) – Please refer to the “Performance at completion” in the Results Tracker section in the last PPR to extract this information.

The project interventions were implemented under six different thematic areas, namely: i) Resilient, Productive, and Protective/Disaster Risk Reduction (DRR) assets/Infrastructure, ii) Drought resistant agriculture and climate-resilient cropping practices, iii) Livelihood diversification and agribusiness/enterprises development, iv) Promotion of renewable energy technology v) Forest resource management, vi) Strengthening local institutional and community capacity. Different interventions under these thematic sectors have significantly contributed to the project outcome by demonstrating positive changes in the lives and livelihoods of community people which is presented below.

Key results in alignment with the Adaptation Fund core impact indicators (reference - performance at completion” in the Results Tracker section in the last PPR):

- ✓ A total of 91,686 climate-vulnerable people (48 percent women; 30 percent youth: direct beneficiaries - 63,125, indirect beneficiaries - 28,561) have benefitted from different project interventions during the project period.
- ✓ A total of 38,608 (45 percent women) of the targeted population benefitted from community messaging and awareness programmes on the predicted adverse impacts of climate change. In addition, 490 staff (42 percent women) including 76 field staff from WFP, CPs and technical staff from local governments capacity strengthened to respond to, and mitigate impacts of, climate related events. A total of 96.1 percent targeted population is applying appropriate adaptation measures.
- ✓ 113 technical committees/associations were formed to ensure the transfer of knowledge.
- ✓ Seven integrated guidelines (on the design and construction of climate-resilient local infrastructure) and seven Local Adaptation Plan of Action (LAPA) were prepared and implemented by seven local governments.
- ✓ 329,245 employment days were created, and cash-based transfers (CBT) of US\$ 1,723,313 were made to 7,421 poor and severely food insecure households (36% women) for their participation in food/cash assistance for assets (FFA) programmes. The cash transfers have been crucial in meeting the immediate food security and livelihood needs of the targeted vulnerable households.
- ✓ The project developed 118 community assets. 42 community infrastructures related to multi-use water system (MUS) based irrigation canals were completed benefitting more than 2,200 households. These irrigation canals increased water availability for agricultural production on 960 hectares of land. As a result, besides regular cropping, farmers started to cultivate both seasonal and off-season vegetables even during the dry season, resulting in increased household production.

Summary result-framework of the project and progress status:

Objective/Result	End-line Target and indicator	Baseline (2018)	Progress as per mid-term evaluation (2021)
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Goal: Increasing the adaptive capacity of climate-vulnerable and food insecure poor by improved management of livelihood assets in Karnali mountain districts of Nepal			
Objective 1: Strengthened local capacity to identify climate risks and design adaptive strategies	1. 80% of target households are aware of predicted climate change impacts; and of appropriate responses of which at least 40% are women	81.8%	96.1%
	2. 7 Municipal Adaptation Plans prepared with identification of climate adaptation strategies at the local level	0	7
Objective 2: Diversified livelihoods and strengthened food security for climate vulnerable poor in target areas	3. 60% of target households have stable and climate-resilient sources of income, of which at least 50% of women are engaged in income-generating ventures	30.9% (11.2% women engaged in IGA)	69.10 (64% of women engaged in IGA)
	4. 40% improvement in food and income availability among those households	-	114%
Objective 3: Increased resilience of natural systems that support livelihoods to climate change-induced stresses	5. 50% of target households have improved access to water for agriculture and drinking water through multi-use water Systems (MUS) and they have access to forest products	36.1%	85.5%
	6. 75% of target households report a reduction in the number and frequency of negative coping strategies	28.8%	76.1%

5. Issues, challenges, and mitigation measures

(Environmental and social risks, gender considerations, and other risks) – Please refer to the lessons learned tab in the PPR, specifically the section on “Implementation and Adaptive Management”

There were a few key lessons learned or challenges faced by the overall project; these were as follows:

- Cash liquidity problems with financial service providers: Local Governments (LGs) and Cooperating Partners (CPs) regularly communicated with each other in time and thus were able to transfer the cash in time via the financial service providers. However, there were

some challenges related to liquidity and system in remote banking institutions, including limited cash due to remoteness of project areas.

- The project was approved before the reform of the state structure with new constitution which established the federal system and set up provincial governments in Nepal. Engagement of the provincial governments was therefore limited, since these entities didn't exist when the project was developed and therefore arrangements to include them in the project governance were not included in the original design. However, the project followed some proactive methods in engaging provincial authorities in project planning, monitoring, evaluation, and establishing and functioning of the provincial climate change management information system. Additionally, a Provincial Project Coordination Unit was also established for province level coordination and information sharing.
- The lack of a project communication strategy led to limited engagement with the media and therefore to a lack of visibility for the project.
- Different timing of planning and reporting: Project had to stick with the annual budget mentioned in the red book (the Government's budgetary system) and the financial expenditure reporting needed to comply with the Government fiscal year/calendar (15 July to 14 July). The project's reporting calendar with Adaptation Fund was October to October and followed WFP's standard calendar cycle (January to December) in its planning and financial system. Due to these different timings, the project's progress and financial reporting had to be managed three times.

According to the project level environmental and social risk screening and assessment results, most of the activities were categorized as category C or low concern. However, as the project included some small-scale infrastructure assets which might have minor potential impacts specifically on access and equity, pollution prevention and resource efficiency, public health, and land and soil conservation, some mitigation measures were considered.

A major intervention was to increase greenery via plantation, thus helping reduce pollution by absorbing carbon dioxide/Green House Gas (GHG). Introducing improved cooking stoves also contributed to reducing GHG. The recharge ponds maintained the water level ensuring an increase in greenery. The plantation and protection of the NTFPs and other herbal plants, the establishment of the nursery to promote the NTFPs and plantation supported the conservation of the indigenous plants. Awareness sessions were provided to the beneficiaries on the importance of the plantation, and conservation of the forest, aimed at sensitizing local dwellers on biodiversity and ecosystem conservation.

FFA interventions mainly included small to medium-sized community infrastructures without use of machinery and other chemical substances. For this, poor and most vulnerable community members were engaged in the construction allowing them to earn through wage labour.

The environmental and social risk screenings of each community infrastructure and preparation and implementation of the management plan was ensured. The table below includes details on some of the environmental and social risks, gender considerations, and other risks and mitigation measures implemented by the project.

Risk	Mitigation Measures
Lack of awareness among participating NGOs and CBOs on climate change and potential impacts	The project continued to deliver different capacity-building programmes and orientations. Information boards and posters to raise awareness were placed in various public places across the target districts. Furthermore, local NGOs and youth groups were oriented on the impacts of climate change on food security and coping strategies. Local Adaptation Plan of Action (LAPA) planning - which includes climate change adaptation sensitization/orientation events - was organized with participation from rural municipality representatives, community members, and other relevant stakeholders. As part of the social mobilization programme, mobilizers also sensitized local communities on climate change adaptation and food security issues.
Some minor inter-and intra-community disputes and conflicts might arise when selecting the project sites and the beneficiaries.	The project followed the participatory planning process and ensured that the needs and priorities of different groups in the communities were considered. Information on the use of grievance mechanisms was widely disseminated and reported to be effective by participants.
Local people who are engaged in construction work might get injured. Water collection ponds might also pose some risks after construction, as people might fall and get injured.	The workforce engaged in the construction of community infrastructures has been oriented on health and safety and security during preconstruction training. Personal protective equipment including a first aid kit and adequate safety gear was provided to all workers based on the nature of their work. Group health insurance policies were purchased. Orientations on health, safety and security were carried out during pre-construction management training. During the reporting period, 7,421 people

Risk	Mitigation Measures
	<p>were engaged in the construction of community infrastructure with all of them receiving orientations on health, safety and security. Constructed water collection ponds were fully fenced to ensure safety as per the environmental and social risk management plans.</p>
<p>Excavation of irrigation canals might lead to soil erosion.</p>	<p>The toe wall and breast wall were constructed to balance the cut and fill of excavated materials. Temporary diversion structures were constructed to fetch water from the stream considering downstream flora, fauna, and aquatic life. Bioengineering work was introduced for slope stabilization work nearby the scheme.</p>
<p>Irrigation activities may reduce the natural water flow of small water streams with associated impacts on the water quantity and quality, biodiversity, and users.</p>	<p>The project supported improvement and rehabilitation of existing farmer-managed irrigation systems. For a few new irrigation canals including rehabilitation of existing ones, the design of irrigation canals ensured that at least 30 percent of the water flow would be constantly maintained in streams in all seasons and in all cases (the national law requires at least 10 percent of the regular flow) thus ensuring the conservation of microflora, aquatic insects and fish in the dewatering zone. Catchment restoration/maintenance activities, such as grass/shrub plantation and construction of recharge ponds, were carried out to maintain/enhance the quality and quantity of water in the streams. The project did not build a permanent diversion (weir) to trap water from a source, only temporary diversion structures were constructed to fetch water to the canal. The project also promoted a multi-usage system (productive use-irrigation and household use-drinking water etc) for the benefit of rural communities.</p>
<p>Project activities might lead to gender-based inequality, discrimination, exclusion, unwanted workload, or safety/protection risks</p>	<p>Project activities engaged more women and marginalized groups as they were given priority. The project ensured equal pay for men and women with no discrimination between them. People of different castes, culture, and backgrounds were also engaged in the project activities, working with good social harmony. The user committee formed for the management of community</p>

Risk	Mitigation Measures
including gender-based violence	infrastructure consisted of at least 50 percent women participation and they had an active role in all decision-making. The provision of light work for the physically disadvantaged group was also considered to ensure social inclusion. During the gender impact assessment of the project, no incidents of violation of safety or protection were reported by beneficiaries while participating in or visiting project events or sites. The income-generating opportunities provided to women, and marginalized groups including persons with disabilities not only achieved project outputs but also contributed to increased confidence among marginalized groups, single women, and persons with disabilities, and social cohesion among diverse caste and ethnic groups.

6. Lessons learned

(Best practices, adaptive management, what worked during the implementation and what did not, what corrective actions were taken during implementation, what are the ways to improve the intervention) – *Please refer to the lessons learned tab in the PPR, specifically the section on “Implementation and Adaptive Management”*

The project highlighted some good practices and lessons which were core to the success of the project as follows:

- Mobilization of local NGOs for community mobilization:** The project mobilized competent and suitable local non-governmental organizations (NGOs) selected as Cooperating Partners (CPs) through an open competitive process. Rather than repeating the process on an annual basis, the selection was conducted for the whole project period which ensured continuity to the project and personnel at the local level. The project selected local NGOs in each district to ensure familiarity with local context, challenges, and opportunities. This guaranteed a strong social mobilization component in the project which helped in analysing the internal and external environment for smooth project planning and implementation. The project operated under the “on budget, off-treasury” modality, whereby the budget was included in the government’s annual plan but funds were not channelled through the government treasury. This approach provided flexibility to hire local NGOs and eliminated periodic gaps, enabling the project to implement and spend activities according to the approved project document throughout the project period

and complete activities in a timely manner. As such, the mobilization of local NGOs has been a crucial factor in the success of this project.

- **The multidisciplinary nature of the project team:** The project team comprised multidisciplinary experts as per the nature of activities and included local experts in agriculture, forest, and natural resource management, enterprise development as well as social mobilizers. The existence of the multidisciplinary team at the local level enhanced the quality and efficient delivery of the project. In addition, the presence of the team also made it easy to coordinate and facilitate with local governments and other line ministries in the districts. These teams were also instrumental in providing capacity development support to government entities in the wake of the new system established at the local levels.
- **WFP's field presence and backstopping:** WFP ensured presence at the district level through field-based staff who worked with partner NGO staff and local government officials on a day-to-day basis. Likewise, WFP also mobilized thematic experts from its field office in Surkhet and Country Office in Kathmandu to provide technical backstopping to implementing partners. This not only helped in oversight and monitoring of the activities implemented in the field but also ensured the quality of the delivery and strict climate-proofing of project activities. The involvement of WFP eased the provision of technical backstopping and capacity development support to government agencies and CPs. This approach enabled quality results and enhanced the capacity of locals to combat climate change shocks.
- **Multi-stakeholder coordination and collaboration:** WFP and CPs ensured timely, regular, and mandatory coordination, collaboration, and communication with the local governments during project implementation which enabled strong ownership and leadership by local governments in the project's outputs. The coordination and collaboration also helped in leveraging co-financing from the Government and were instrumental in developing and implementing sustainable tools for the created assets and ventures.
- **Programmatic flexibility:** The project document allowed flexibility in the planning of programme activities, observing the principles of community-based adaptation. The

original project document provided a broader programmatic direction and framework including results framework and indicative activities. This flexibility also meant that programme activities could be planned through strong coordination and collaboration with local government and could be based on the LAPA plan to address the real adaptation needs of communities.

- **Performance-based budget management:** The project adopted robust measures from the outset in budget management to tie up the disbursement based on the performance of the CPs. The project had an annual Field Level Agreement (FLA)/implementation agreement mechanism with CPs, where the CP's performance was evaluated against key performance indicators (KPI). As such, renewal of FLAs was contingent upon the achievement of KPI and successful Annual Performance Evaluation based on pre-defined activities, budget, roles, and responsibilities. A complementary mechanism to support the smooth fund flow of project activities was the procurement of non-local materials through the UN's standard procurement system and paid directly by WFP, reducing the number of resources through local NGOs. Likewise, the wage payment to FFA participants was directly made by WFP through its Financial Service Provider (FSP), reducing the need for huge fund flow to/from local NGOs. All these arrangements allowed the project to employ performance-based budget management which helped in the timely expenditure of the project budget. Full flexibility to the project operation, planning, and financial management through the "on budget - off treasury mechanism" allowed no periodic gaps, thereby helping in implementing/spending activities/budget as per approved project document throughout the project period and contributing to timely completion of the project. In addition, it also allowed the repurposing of activities considering additional job creation during the COVID pandemic which was well received by local communities, particularly of the most vulnerable HHs.
- **Systematic beneficiary targeting approach:** The project employed a systematic beneficiary targeting approach based on evidence and transparent indicators. The approach of geographic targeting was based on climate change vulnerability, adaptive capacity, and food insecurity. In addition, beneficiary targeting was based on well-being and climate vulnerability ranking. These scientific and right-based targeting approaches contributed to addressing the need of the most vulnerable households from food-insecure and climate change-affected areas.

- **Direct procurement of non-local construction materials:** Since the procurement of non-local construction materials would cost a large share of the project, WFP employed a process to minimize costs and ensure quality and timely delivery of construction materials while removing potential fiduciary risks/corruptions in the procurement process. WFP procured non-local construction materials directly using its procurement process at the beginning of the project rather than making small scattered annual procurements by implementing partners. Suppliers were identified locally but they were contracted through long-term agreements (LTA) to supply construction materials throughout the project period. Local suppliers were also responsible for the delivery of non-local construction materials from the same procurement.
- **Consorted efforts for system strengthening:** The project not only introduced tools and mechanisms for quality assurance and control (e.g close supervision/monitoring checklist/engineering quality test/milestone-based layout) but full focus went into mainstreaming these tools into local government systems. For example, the project developed operational guidelines for the construction of resilient infrastructure and sustainable management and was endorsed/adopted by local governments. The local governments were also encouraged to establish Operations and Maintenance (O&M) funds for sustainable operationalization of the community assets. These efforts for strengthening the system in the delivery of resilient community assets have served in strengthening the capacity of the local governments beyond the scope of the project.
- **Climate and environmental proofing of the infrastructure:** Climate-resilient infrastructure was developed by ensuring that an asset was located, designed, built, and operated in a way that anticipates, prepares for, and adapts to changing climate conditions. To achieve this, the project took several measures including i) ensuring infrastructure was resilient to potential increases in extreme weather events such as landslides, floods, and extremely cold weather; ii) building flexibility so assets can be modified in the future without incurring excessive costs; and 3) ensuring that the local government can manage the assets through the preparation of different policies and guidelines; iv) ensuring that every asset screened for their environmental and social risks at the planning stage. The process followed by the project for planning, designing, and

delivery of climate-resilient and productive community assets has provided a stepwise guideline for local governments for future planning and use as well.

- **Delivery of integrated livelihood supports:** The project put concerted effort to make integrated delivery of different types of support to the same vulnerable households so that the impact was lasting and sustainable. In most cases, the project assembled three types of support mechanisms (i.e., resilient infrastructure, livelihood supports, and capacity strengthening) as a support package rather than standalone livelihood opportunities for vulnerable communities. Such integrated support was unique to the project compared to other climate change adaptation projects in Nepal – most of them focusing on either one or two of these components.
- **Customized and targeted support according to the beneficiary needs:** The project interventions were catered to the different needs of beneficiaries. While community members who have land were supported through livelihood assistance, agricultural training, and construction of community assets, those who didn't also benefitted from the creation of green recovery jobs that built resilient local infrastructure. These employment opportunities were provided to marginalized and vulnerable households targeted based on climate vulnerability, poor socio-economic status, and food insecurity, and mostly during the time of agriculture lean season. Cash transfers made to these households provided immediate relief in food insecure households.
- **Supporting the reduction of workload for women:** The project had inbuilt interventions which contributed to reducing the workload of women. For example, the drinking water system constructed by the project helped to reduce the time and drudgery for women when fetching water. In places where women used to take the role of dehusking grains, the project promoted a new *Dhiki* (local type of grain dehusking tool) resulting in men also joining in on this role. Women and girls were usually assigned the role of dehusking while men were restricted to dehusking the paddy due to cultural taboos. However, the introduction of *Dhiki* encouraged men to take the role. Such type of timesaving for women has helped them to invest their time in income generation-related activities such as vegetable farming, rabbit rearing, mushroom cultivation, and children's education.

7. Innovation

Description of any innovative practices or technologies that figured prominently in this project –
Please refer to the lessons learned tab in the PPR, specifically the section on “innovation”

Innovation refers to the development/deployment of new products, noble processes, services, technologies, and business models to achieve targeted results at a lower cost and greater effectiveness. The project maintained flexibility in planning and implementation to encourage innovations and programme delivery methods to maximize the effectiveness, efficiency, equity, and sustainability of the results. The project introduced innovative interventions to strengthen ownership of climate risk reduction activities and encourage replication of lessons in key livelihood sectors. These include the creation of the Provincial Climate Change Information Management System (PCCMIS), the establishment of the Municipal Agro-meteorological Information Center (MAIC) for localising the climate-information system and agro-advisory, the development of the climate-smart villages, and custom hiring centres, among others.

Establishment of Provincial Climate Change Management Information System (PCCMIS):

In order to mainstream the scattered climate information, the project established and strengthened the PCCMIS within the climate change section of the Ministry of Industry, Tourism, Forests and Environment (MoITFE) in the Karnali Province as a pilot initiative. The PCCMIS consolidated the provincial-level climate change impact, evidence of climate-induced disasters/shocks, and other relevant information and adaptation and mitigation initiatives covering the eight different sectors of Climate Change Policy, 2019 (i.e. agriculture and food security; forests, biodiversity, and watershed management; water resources and energy; rural and urban habitats; industry, transport, and physical infrastructure; tourism, culture, and nature; health, drinking water and sanitation; disaster risk reduction and management); and four cross-cutting sectors (gender equality, and social inclusion (GESI), livelihoods and governance; awareness, education, and capacity building; research, technology, and climate finance). The web-based CCMIS developed in Karnali Province will be linked and fed by municipalities, other relevant federal and provincial government agencies, and other sources, to generate integrated climate and disaster-related information in order to support the design and manage climate action/resilience building in the province.

The PCCMIS system – a web-based application-, has been uploaded onto <https://pccmis.karnali.gov.np/> which is a government domain and is available in both English and

Nepali language. Closed access to administrators and users from each level of government as well as stakeholder organizations have been ensured.

There are eight features in the PCCMIS system: Climate, Agriculture, Disaster, Notices, Environment, Projects, and Knowledge. Some of the notable ranges of information included in the PCCMIS are: Climate Page which includes weather updates, climate normal, climate variability, weather forecast, and future climate projections; Environment Page which includes greenhouse gas emission status and pollution; Disaster Page which includes disaster incidents, hazard maps, loss, and damage; Real-time Monitoring including river watch, rainfall watch, forest, drought; Agriculture Page which includes agro-map, crop and livestock, Medicinal and Aromatic Plants (MAPs) and NTFPs, municipal agro-met bulletin and compendium of Climate Smart Agriculture practices; Projects Page which includes different projects in the province, institutions active in climate change adaptation, and Knowledge Page which includes knowledge hub for everyone, glossary and success stories related to climate change response.

Establishment of Municipal Agro-Meteorological Information Centers (MAMIC) for localization of climate-information system and last-mile agro-advisory/climate services:

The project supported the establishment of the Municipal Agrometeorological Information Centers in project-implemented rural municipalities. These MAMICs collect, analyze, and disseminate last-mile climate/weather information to local communities in a tailored and easily understandable format, particularly for farmers, based on existing/available agro-climatic, weather-related information, forecast, and advisories from the Agriculture Management Information System (AMIS), the Nepal Agricultural Research Council (NARC), and the Department of Hydrology and Meteorology (DHM); and to collect and feed the climate change impact, evidence of climate-induced disasters/shocks and other relevant information and adaptation and mitigation initiatives.

The MAICs were established in seven LGs of the project districts. The agriculture extension services provided at the municipality included weather forecasts, weather alerts, notices on agro-advisory services, crop and livestock advisories, and best management practices at the local level. These centers have enabled farmers to make informed decisions to develop resilience against climate shocks and stresses thereby improving their livelihood and food security. In addition, these centres have been established in local municipalities to support capacity development of government staff within the agriculture section of the LGs so that they can operate, maintain, and administer the established system themselves.

The project established a system for accessing national climate information and built the capacity of local government technical personnel to analyze and prepare localized advisories. Those messages were then relayed to farmers' group leaders, lead farmers, and nodal farmers for them to further disseminate the advisories to group members and other farmers. The pilot used existing farmers' groups networks to quickly and efficiently deliver locally developed climate advisories by subject matter experts, resulting in a timely and effective integration of climate information into the existing agriculture extension system for smallholder farmers in Nepal.

Climate-Smart Villages: a participatory approach for building climate resilience. The project created eight Climate-Smart Villages (CSVs) in seven LGs using a scalable approach and six components such as climate-smart technologies, finance, and policies. The objective was to identify gaps in reference villages and provide support to fill them, leading to community resilience building. The project contributed to the Government's policy goals of establishing 200 CSVs by 2020 and 170 by 2030. In total, 904 households benefited from this intervention.

Establishment of a Custom Hiring Center: The status of agricultural mechanization is very poor in Nepal. Traditional farming methods and practices in Nepal use local tools (like plough) or tidy manual methods for digging, weeding, harvesting, threshing, hulling, grading, etc. which often requires high number of labours which is not as efficient. Local tools and traditional methods often require heavy machineries, which can be difficult for women to operate. Tools like tillers, threshers, weeders, planters, carts, harrows can reduce the workload and drudgery in farming, but they are not affordable to smallholder farmers. Therefore, the project supported the establishment of a hiring center in all seven LGs at the community level, which the project has supported through the availability equipment and tools for hire for members of farmer groups. As such, this practice has helped smallholders to reap the benefits of these tools and equipment without owning the equipment.

8. Description of the vulnerable communities and social groups affected by the project, and how they have been engaged and empowered

You might want to refer as well to the section on “community/national impact” in the lessons learned tab of the PPR

The project envisioned supporting climate-vulnerable and food-insecure communities, particularly poor women, and people from marginalized groups to enhance their adaptive capacity to adverse impacts of climate change. GEDSI was an integral component of this project, working to adopt positive strategies to promote GEDSI where both strategic and practical needs of women and marginalized groups could be addressed.

The project ensured that women and marginalized groups were involved in decision making processes at different levels, for example, in user committees. The project encouraged a compulsory 50 percent membership of women in different user committees and community-based organizations (CBOs). Such inclusive participation of women in user groups ensured their voices and opinions were considered in scheme selection, implementation, monitoring and evaluation, and operationalization of assets and application of a gender lens during all these processes. As a result, women also had increased decision making in households, society, businesses, ward offices, municipalities, and financial institutions. Through effective social mobilization, the project also ensured the participation of socially excluded groups (like Dalits) in user committees and their involvement in activity design, implementation, management, and monitoring.

Strategies to increase women's engagement in FFA activities: FFA activities sometimes involved heavy lifting and strenuous physical work which created challenges in engagement women in such activities. To mitigate these, the project adopted a few strategies to ensure high participation of women in FFA schemes, as per below:

- **Ensuring a safe workplace:** The project promoted the Do No Harm Principle and ensured workplace safety by applying effective social mobilization. This helped to increase overall participation and community members were not hesitant to join project sites. Women were provided an enabling environment to maintain their privacy by setting separate temporary toilets at the project sites. The provision of personal protective equipment (PPE) to all participants also contributed to enhancing the participation of women. A gender-focal person was appointed in the implementing NGO to ensure GEDSI issues were well addressed and ultimately contributed to the high level of engagement of women members in programme implementation (FFA and income generation). Ultimately,
- **Work division:** The project team ensured a clear role division among male and female participants of the FFA activities at the project site, with mandatory groups set up to

prepare work plans and divide tasks between men and women. Light work like sand and pebble carrying was assigned to women while comparatively harder work like breaking and carrying bigger stones was assigned to men. Each working group was made inclusive of both men and women to take on those assigned roles.

- **Ensuring equal wages:** The project enforced equal wages for all participants irrespective of their sex which brought in more women to FFA activities.
- **Support in access to finance, social protection, and overall empowerment of women:** This project activity had a strong positive impact on the overall empowerment of women beyond direct support to food and income as the project prioritized women as the cash recipient of the FFA activities. As a result, women were encouraged and supported to open bank accounts, some for the first time in their lives, giving them safe and secure financial independence. Previously, people were given social security allowances directly through cash. Due to the influence of the project, the Government has now started to provide these allowances through financial institutions. This was a great achievement of the project which has also contributed to social inclusion.
- **Improving access to financial institutions:** As all FFA participants required bank accounts to receive their entitlement, the project helped women and marginalized groups connect to banking institutions and gave them direct access to cash. Women were able to get cash safely and securely from financial institutions near their residences. Many of the participants, including vulnerable women and marginalized groups, had a bank account for the first time in their lives. This contributed to financial inclusion for women and socially marginalized people contributing to the Government of Nepal's target to open a bank account for every household in Nepal.
- **Conducting Gender Impact Assessment:** The project conducted a gender impact assessment (GIA) assessment to analyse how its activities impacted different aspects of gender empowerment. The study looked at the impact of the interventions through a gender, inclusion, and disability lens. The GIA assessment was seen as a good monitoring and evaluation practice, not only to assess the impacts but also to provide strategies to the project to make positive changes for GEDSI integration.

- **Integrating GEDSI indicators in monitoring and evaluation framework:** The project ensured GEDSI aspects while designing its monitoring framework as all the indicators asked for disaggregated data based on sex, age, disability, and social groups. As such, the project had clear targets in terms of the inclusion of women and people from marginalized groups. Later, disability inclusion was also included.

9. Description of how long-term institutional and technical capacity for effective adaptation has been strengthened

Please refer to the lessons learned tab, section on “readiness interventions”

Enhanced LAPA serving tool for mainstreaming climate change adaptation. Nepal was a champion in developing the Local Adaptation Plan of Action (LAPA) framework which is recognized as a tool to mainstream climate change adaptation into development plans at the local level. The first LAPA framework was developed in 2013 when the Village Development Committee (VDC) was the lowest-developing planning unit. Since entering a federal structure in 2015, VDCs were replaced by local governments (e.g., rural/urban municipalities) which are larger in geography and far-greater autonomous than VDCs in their authority. Due to this structural change in the development planning process, the previous LAPAs were revised to make them relevant under the new federal system. The Government published the new LAPA framework in 2019. The project took the opportunity to pilot the revised LAPA framework and develop their own in seven rural municipalities, providing technical assistance to local governments to integrate the identified climate change adaptation interventions in their annual plans and budgets. The project also emphasized on systematically integrating GEDSI aspects in the local adaptation planning.

The development of LAPA was a consultative process where local governments were closely involved, often providing leadership in the facilitation of the process. WFP provided thematic consultants to ensure rigorous analysis and synthesizing of the report. Special attention was provided to build the capacity of the local government’s thematic staff, elected ward officials, and municipality officials during the process of climate risk analysis and identification of adaptation options. To ensure that the quality of the document was well maintained, WFP and its partner staff were involved throughout the process of data collection and consultations. Due to this broad participation and engagement, all LAPAs developed under the support of the project were endorsed and are being implemented by the respective LGs. Local governments have already

started to include priority activities identified by LAPA in their annual plans. In the fiscal year 2022/2023, around US\$ 5 million has been allocated to various adaptation activities identified in LAPA by seven local governments where the project was implemented.

The final LAPA reports provided a list of priority adaptation actions for various climate-vulnerable sectors, risk-prone locations, and highly vulnerable populations that the local governments will gradually put in their annual plan. Thus, the development and endorsement of LAPA built the capacity of local governments for mainstreaming climate change adaptation activities in their regular plans systematically. The involvement of local government personnel in the process of developing LAPAs provided knowledge and skills to analyse climate risks and identify adaptation options at the local level. This will help to update the climate risk analysis and planning adaptation actions during the local planning process beyond the scope of this project. Since this was the first project to use the revised framework to develop LAPA at the LG level, it will serve as a reference document for future. While the Government has a target to prepare LAPAs for all *palikas* in the country, lessons learned from this process will be valuable. Therefore, the process for the preparation of the LAPA by using a revised framework has been documented and shared with the MoFE for wider sharing.

Farmers' Field School to train farmers on climate-resilient technologies and practices. A Farmer Field School (FFS) is a group-based learning process that has been used for decades, mainly for promoting integrated pest management practices. The project applied the FFS model to train smallholder rural farmers on various climate-resilient technologies and practices through a learning-by-doing approach. Farmers grew their crops by adopting a particular resilient technology/method/variety for a whole season and learned in the process. The facilitators encouraged farmers to reflect and explore appropriate climate-resilient practices while they met in the FFS.

A total of 85 FFS were supported by the project in climate resilient agricultural practices such as low tillage, water use efficiency, protecting soil moisture, intercropping systems, varietal selection for resilient alternate crops/drought resistant crop species, soil conservation methods such as terracing, Sloping Agriculture Land Technology (SALT) and Good Agricultural Practices (GAP) with already developed and tested such as integrated pest management and organic farming. This trained 1,196 smallholder farmers (72 percent women) and enhanced their capacity to adopt climate-resilient technologies. Since the FFS were conducted in learning plots established by

farmers' groups, they also served as demonstration centers for new climate-resilient technologies for other farmers around the village who were not FFS participants themselves. This way, FFS not only helped to enhance the knowledge and capacity of participating farmers but also helped in technology transfer among other farmers in the region.

The project supported to develop human resources at the local level who will continue the experimental learning process and innovation platforms beyond the project scope. The existence of such a local-level learning/sharing platform is crucial for technology transfer for adaptation to climate change.

Technical assistance to draft guidelines and directives. The project built the capacity of local governments to mainstream good practices and create operational guidelines based on project learnings. Guidelines, including the local infrastructure management directive, were developed to ensure sustainable management of community-based infrastructure, considering climate and GEDSI-related factors. Additionally, guidelines for infrastructure monitoring, supervision, and environmental/social risk screening were prepared, including a process and checklist for conducting an environmental and social risk assessment of community infrastructure. The project also established a maintenance fund in each local government.

Successful approaches for planning and delivering resilient, small community-based infrastructure applied in the project have the potential for scaling up in other local governments. The learning of the project has been crucial in designing the technical support approach in the pilot programme for 'The Local Infrastructure Support Programme (LISP)', which is a new initiative in Nepal to build the capacity of local governments in delivering resilient community-based infrastructure. The technical assistance support modality for LISP is being piloted in 15 local governments in the Karnali province of Nepal.

Likewise, one of the strengths of the project in system strengthening was the asserted effort on integrated and layered interventions along the value chain. The project not only invested hugely in developing productive and resilient community assets, but also in productivity-enhancing technologies, establishing market linkages, establishing processing facilities and supporting agribusinesses as well as promoting crop-livestock insurance for farmers, and diversification of livelihood options for households highly relying on only one source of income.

Additionally, the project invested in capacity strengthening of the CBOs including community forestry user groups (CFUGs), leasehold forestry groups, farmers groups/cooperatives, and community asset user groups. This capacity development support outside the Government system will also be crucial for the sustainability of the project results and for creating an enabling environment for mainstreaming climate change adaptation at the local level.

The project supported revising and renewing the operational plans of 16 CFUGs in project districts. This helped in the renewal of the operational plan for forest management which is an important component of community resilience building by promoting/conserving forest resources. The project also supported the establishment of 118 user groups to develop and reinforce community assets. These groups are crucial for managing the community assets effectively and sustainably, which will promote community resilience.

Additionally, the project provided capacity building support to 172 farmers' groups by helping them to hold regular meetings, register with authorities, and access government extension services. The project has also established connections between these groups and formal/informal government extension systems, ensuring continued support. Furthermore, the project has connected the farmer's groups with insurance service providers, allowing them to access agricultural insurance and manage the risks associated with farming.

10. An overview of complementarity and/or coherence of with other climate finance sources in the context of this project (synergies with other projects, national plans etc.)

Please refer to the lessons learned tab, section on “complementarity and coherence”.

The project is aligned with national priorities such as National Climate Change Policy, 2019; Second Nationally Determined Contribution (NDC-2020); the National Adaptation Plan (NAP), 2021; NAPA 2010; LAPA 2019; Nepal's 15th Periodic Plan (2019-2024) and the Agriculture Development Strategy (ADS) 2015-2035².

The National Climate Change Policy, 2019 identified eight thematic sectors with two sectoral priority areas – agriculture and food security; and disaster risk reduction where it has prioritized food security, nutrition, and livelihoods will be improved by adopting climate-friendly agriculture

² <https://www.mofe.gov.np/resources/policy-and-strategies-9446>

system, and disaster risk reduction/management where it has highlighted that loss or damage to be caused by climate-induced disasters to lives and property, health, livelihoods, physical infrastructures, and cultural and environmental resources will be reduced.

Second Nationally Determined Contribution (NDC-2020) has a separate adaptation component, where it highlights adaptation actions and aims to adopt an integrated approach to cover climate-sensitive sectors including agriculture and food security and disaster risk reduction and management (DRRM) as one of the important thematic areas. The NDC has also prioritized establishing climate-smart villages and climate-smart farms; and increasing access to Climate Smart Agriculture technologies for women, indigenous people, smallholder farmers, and marginalized groups. The National Adaptation Plan of Programme (NAPA) 2010 has highlighted assessing and prioritizing climate change vulnerabilities and identifying adaptation measures.

The National Adaptation Plan (NAP), 2021 has set out priority programs in the nine thematic sectors as outlined in the National Climate Change Policy. The programs include adaptation actions that are best able to address climate vulnerabilities and risks in the short (2025), medium (2030), and long term (2050); as well as adaptation actions that contribute to the achievement of national economic and development priorities. The National Framework on Local Adaptation Plan of Action (LAPA), 2019 calls for developing a climate-resilient society through mainstreaming climate change adaptation and disaster risk reduction and management whilst implementing development priorities and resource management at the local level; Nepal Second National Communication to UN Frame Convention of Climate Change (UNFCCC), 2014 also has a separate component on vulnerability and adaptation where it also focuses agriculture and climate-induced disasters as one of the important sectors.

In addition, the project is aligned with the Agriculture Development Strategy (ADS) 2015-2035 in promoting a climate-resilient agriculture system; the 15th Periodic Plan (2019-2024) in promoting resilient livelihood and Nepal's Long-Term Vision, 2043.

Likewise, the project also complemented similar activities including the WFP and UNDP project Local Infrastructure Support Programme (LISP) which supports green resilient infrastructure development, Agriculture Sector Development Project (ASDP), and Adaptation for Smallholders in Hilly Areas (ASHA) funded by International Fund for Agricultural Development (IFAD) and UK-funded Nepal Climate Change Support Programme (NCCSP II). The ASDP targets smallholder

producers and landless rural people interested in targeted value chains activities such as apple, ginger, and goat. The project also complements the NCCSP II, which aimed to address four significant climate risks related to infrastructure, agricultural yield, and food security: natural resources and biodiversity targeting the poor and women.

11. Sustainability, scalability, and replicability

Please refer to the lessons learned tab, section on “climate resilience measures”

The project has invested in the capacity strengthening of the CBOs including community CFUGs, leasehold forestry groups, farmers groups/cooperatives, and community asset user groups. This capacity development support outside the government system will also be crucial for the sustainability of the project results and for creating an enabling environment for mainstreaming climate change adaptation at the local level.

The project has maintained flexibility in planning and implementation to encourage innovations in programme and programme delivery methods to maximize the effectiveness, efficiency, equity, and sustainability of the results.

Consideration of optimum use of local resources embedded with indigenous technology has been considered while designing the assets for the promotion of sustainability and easiness in the construction as the communities easily understood the development process.

Section B: Project expenditure

(The use of spreadsheet is recommended to avoid numerical errors.)

- Project budget
- Actual expenditures
- Variance notes

ITEM / ACTIVITY / ACTION	Total Budget Ceiling	Actual expenditure till 20th April, 2023	Remaining Budget
Output 1.1.1 Train and mobilize officers and community representatives at village and district to design, implement and monitor local adaptation strategies	609,999.00	609997.98	1.02
Output 1.1.2 Local and food security and climate adaptation planning supported	172,814.00	172813.71	- 0.29
Output 1.1.3 Gender and social inclusion are well integrated into the adaptation planning processes	30,680.00	30678.78	1.22
Output 1.2.1 Local adaptation plans integrated into sector-wise, locals and district planning process	69,029.00	69028.54	- 0.46
Output 1.2.2 Integrate climate resilience to planning processes and development projects of key national ministries	382,591.00	382590.32	0.68
Output 1.2.3 Conduct periodic assessment and document project lessons for dissemination at community, district and national levels	84,327.00	84326.63	- 0.37
Output 2.1.1 Provide increased income opportunity for poor households, especially during agricultural lean-season, through building physical and natural livelihood related assets	3,187,121.00	3187120.28	0.72
Output 2.1.2 Increased local availability and access to food and nutrition through better storage and value-addition in all target VDCs	1,058,743.00	1058742.07	0.93

Output 2.1.3 Improved and adapted current crops and livestock management practices to increased climate risks	744,367.00	744366.82	- 0.18
Output 2.1.4 Increased income through livelihood diversification using local resources	1,031,507.00	1031505.71	1.29
Output 2.1.5 Renewable energy based systems introduced to support women-led enterprises	1,279,847.00	1279846.19	0.81
Project Execution Cost	129,765.00	112133.19	17,631.81 (final evaluation and audit related costs)
Project Cycle Management Fee	746,367.00	746303.43	63.57
TOTAL	9,527,160.00	9509453.65	17706.35