

General Template of the Annual Performance Report (APR)

*Reference Number (FP018): Scaling-up of Glacial Lake Outburst Flood (GLOF)
risk reduction in Northern Pakistan*

Accredited Entity Name: UNDP

*Annual Reporting Period Covered in this Report:
(From 01-01-2021 to 31-12-2021)*

Sections in this report:

- Section 1: General Information
- Section 2: Implementation Progress
- Section 3: Financial Information (link to the excel worksheet).
- Section 4: Report on Environmental and Social Safeguards & Gender
- Section 5: Annexes
- Section 6: Attachments

SUBMITTED BY	
Karma Lodey Raptan, Regional Technical Advisor	<i>Date of submission to GCF: 1st March 2022</i>
<i>Please indicate if this report has been shared with the relevant NDA(s) for this Funded Activity: Yes</i>	<i>Date of submission to NDA: 1st March 2022</i>

SECTION 1: GENERAL INFORMATION

This section provides general information on the funded activity.

1. Funded Activity Title:	<i>Scaling-up Glacial Lake Outburst Flood (GLOF) risk reduction in Northern Pakistan</i>
2. Funding Proposal Number:	<i>(FP018)</i>
3. Date of Board approval - Board Meeting Number:	10/14/2016 <i>B.14</i>
4. Accredited Entity:	<i>UNDP</i>
5. Focal Point of the Accredited Entity for this Project:	<i>Mr. Karma Lodey Raptan</i> <i>Email: karma.raptan@undp.org</i>
6. Executing Entity(ies):	<i>Ministry of Climate Change</i>
7. Implementation Period:	<i>From: 7/12/2017</i> <i>To: 1/11/2024</i>
8. Current year of Implementation:	<i>Year: 5</i>
9. Date of Submission of the Report:	3/1/2022
10. Annual Reporting period covered in this report:	<i>From: 1/1/2021</i> <i>To: 12/31/2021</i>
11. Total Project Budget ¹ :	<i>USD 37,460,000.00</i>
12. Total amount of GCF Proceeds Approved:	<i>USD 36,960,000.00</i>
13. Total amount of GCF Proceeds disbursed (cumulative) to the Accredited Entity:	<i>USD 17,965,463.00</i>

¹ Total project budget including co-financing as reflected in the relevant Funded Activity Agreement.

SECTION 2: IMPLEMENTATION PROGRESS

2.1 OVERALL (SUMMARY) PROJECT PROGRESS (*less than one (1) page*).

2.1.1 Overall Progress Achieved Since Project Start

The project was approved by the GCF Board at its 14th Meeting on 12th to 14th October 2016. The FAA for the project was signed on 19th May 2017 and became effective on 12th July 2017. The Project Document was signed between UNDP and the Ministry of Climate Change (on behalf of the Government of Pakistan) on 24th August 2017 and project implementation initiated in July 2018, following receipt of the first disbursement in April 2018 and conducting the Inception Workshop in July 2018. However, activities of the project were put on hold in October 2018 for a period of 5 months, owing to a review of implementation arrangements initiated by the Executing Agency (Ministry of Climate Change). To date, the project has carried out significant activities that include (a) procurement of Early Warning System (EWS) for 24 valleys completed; b) 28 of the total 240 irrigation schemes completed; (c) 160 ha out of a total of 700 ha of slope stabilizations activities; d) Community Based Disaster Risk Management Committees (CBRMCs) established in 24 valleys, as well as community-based Hazard Watch Groups (HWG) setup; e) Several studies completed - such as Hazard vulnerability risk assessments, GIS mapping of vulnerable communities, ground-truthing baseline surveys, Knowledge Aptitude and Practices studies, stakeholders needs and capacity assessments, bio-engineering feasibility and forest surveys; f) Climate Change Cell established at MoCC. In addition project also completed to date the Gender Strategy and Action Plan; Stakeholder Engagement Plan and Grievance Redress Mechanism; Interim evaluation (conducted between June-September 2020 and submitted to GCF on 13 Oct 2020); Project Revival Plan as recommended by the Interim Evaluation; Baseline Assessment finalized in October 2020 and submitted to GCF for approval, with proposed adjustments to the project log-frame.

The co-financing materialised from GB government was utilized for the deployment of 14 personnel within P&DD for project management activities, progress mapping, and coordination with line departments.

2.1.2 Progress Achieved in 2021

The AWP for 2021 was signed on 3rd of January 2021. During the reporting period, the project delivered USD 6.21 million (60%) against the planned budget of USD 10.27 million.² The 2nd disbursement was received on 16 June 2021. Co-financing of USD 49,201 (PKR 8,756,302) was reported from the government of Gilgit-Baltistan (GB) for the reporting period.

The project encountered some delays in Q1/Q2 due to non-availability of funds, as discussions were ongoing with GCF for the release of second disbursement (until May 2021). The project successfully implemented actions proposed under the 'Project Revival Plan' and 'Management Response' against the Interim Evaluation. A tripartite meeting was held between UNDP, Economic Affairs Division (EAD) and Ministry of Climate Change (MoCC) on 16th April 2021, where progress was reviewed and all parties agreed on the way forward. During the year, the project held monthly progress review meetings with Responsible Partners in both provinces. Additionally, detailed progress review meetings with Implementing Partner and UNDP were held every quarter.

The Baseline Assessment Report (with recommended changes in baselines, indicators, and targets in logical framework) and Environment and Social Management Plan (ESMP) were submitted to GCF in October 2020. The ESMP was approved by GCF in October 2021. However, with regard to the Baseline Assessment Report, GCF requested for additional clarification and documentation, which was provided in mid-Dec 2021. Based on the recommendation of the Interim Evaluation and given the delays in the initial phase of implementation, the project requested an extension of 18-months to GCF. This was approved and the notice of extension was received on 19th August 2021 with a closing date of 11 Jan 2023 and completion date of 11th January 2024.

During the reporting period, one of the key activities was the successful completion of procurement of Early Warning System (EWS) equipment, which was conducted through open competitive bidding. The EWS procurement comprised of Automatic Weather Stations, rain gauges, water discharge gauges, water depth gauges, snow depth sensors, warning posts, central data processors and gateways, and communication and data transmission equipment. The installation of these EWS equipment will be undertaken in 2022. Other activities implemented in 2021 include the following - (a)

² Original AWP approved in January 2021 was of USD 14.8 million, however this amount was revised to USD 10.27 million due to delayed disbursement in June 2021. The revision was approved during provincial PSCs on 15th October (GB) and 21st October (KP), approved by MoCC on 1st November and endorsed by Project Steering Committee meeting on 28th December 2021.

Hazard Vulnerability Risk Assessments for 09 valleys of GB and 03 valleys of KP; (b) Knowledge, Aptitude and Practice (KAP) studies for 16 valleys of GB; (c) assessment of potential socio-economic impact of GLOFs for 16 valleys of GB; (d) GIS mapping of vulnerable communities for 09 valleys of GB and 03 valleys of KP; (e) dedicated social media channels launched (Twitter: <https://twitter.com/Glof2Pakistan>, You Tube: <https://www.youtube.com/channel/UCfYuS4TQfSVm69mL4IVzdsW>, Instagram: <https://www.instagram.com/glof2pakistan/>, Facebook: <https://www.facebook.com/GLOF2Pakistan>), (f) 07 public service messages of stakeholders recorded on climate change and Glacial Lake Outburst Floods (GLOFs), (g) 02 in-house documentaries launched (h) documentation and demonstration of indigenous best practices of 01 Glacier Grafting and 03 Ice Stupa formations; (i) 03 development of inter-agency multi-level SOPs/Plans for GLOF/Disaster risk reduction; (j) 71 community level sensitization sessions, 43 mock drills and 51 trainings conducted following COVID-19 SOPs were held, (k) Community Based Disaster Risk Management Cells (CBDRMCs) established in all 24 valleys, (l) community-based Hazard Watch Groups (HWG) were setup and registered with relevant government authorities; (m) designs and BoQs of 97 small-scale infrastructures completed with construction work initiated on 73 infrastructures; (n) designs and BoQs of 79 new irrigation schemes finalized with construction work initiated on 48 schemes and physical work on 28 schemes completed; (o) 160 Ha slope stabilization completed through compact plantation, pasture improvement and bio-engineering structures; (p) designs and BoQs of 12 CBDRMCs centers completed; (q) IEC material produced and distributed nationally/internationally during World Environment Day, UN-Day, International Mountain Day, International Disaster Risk Reduction Day and National Disaster Resilience Day; and (r) provincial Climate Change Adaptation Action Plan (CCAAP) drafted.

The above results are contributing towards providing a long-term strategy and strengthening relevant local government departments, including empowering communities and stakeholders to identify and manage the risks associated with GLOFs and other related impacts of climate change. The Government co-financing has contributed to enhanced capacity of the responsible party i.e., P&DD GB for monitoring, oversight, and coordination with different line departments implementing project activities in the provinces.

The challenges faced by the project during the reporting period include – delay in implementation of field activities due to un-availability of funds in the first half of 2021 - as 2nd disbursement was received only in June 2021. In addition, field implementation was affected during GLOF events in Q1/Q2 due to melting glaciers and flash floods and landslides in Q2/Q3 - as a result of heavy monsoon rains (that limited access to project locations). During these extreme events, much of the government resources and personnel had to be diverted for humanitarian relief and response measures. The limited capacity of responsible partners is yet another challenge that affected progress. In addition, the onset of new variants of COVID-19 delayed certain project activities especially the ones involving travel and trainings. The procurement of EWS equipment was delayed due to change of procurement process proposed by the Implementing partner. As a result, the installation of EWS equipment will now take place in 2022. During the reporting period, the project developed a detail implementation plan along with timelines and monitored progress on a regular basis. Regular discussions were held with federal and provincial officials to review and monitor progress and address implementation bottlenecks. A detail procurement action plan on EWS procurement was also developed and monitored until the procurement was completed in Dec 2021. The project also sought additional support from Bangkok Regional Hub and Procurement Support Office in Copenhagen to realize the procurement of EWS equipment. Despite all the above challenges, the project achieved good progress in 2021. As of 31 Dec 2021, the project has achieved a cumulative financial progress of 74.54% against the total USD 17.97 million received so far.

2.1.3 Update on Project Risks

During the reporting period, the project risk rating remained moderate with no significant risks identified. The Project has developed a separate Risk Mitigation Plan for 2022 covering foreseeable risks along with risk management strategy. This is important especially because the project is expected to realize three remaining disbursements in 2022. The project foresees a risk of realizing the three remaining disbursements by closing date (11th Jan 2023). However, the project has prepared a detail implementation plan to mitigate this risk through timely finalization of AWP 2022 and LoAs with GB and KP; timely release of funds to responsible partners; ensuring timely disbursement releases from GCF, fortnightly coordination meetings with line departments/Responsible Parties (RPs) to review progress and challenges and ensure delivery; improved procurement planning; improved monitoring tools through use of risk register, Gantt charts and mapping of activities on centralized dashboard/Project Monitoring Information System. The above risk and other project risks are monitored on a quarterly basis and recorded and tracked through the risk register in ATLAS.

2.2 Performance against the GCF Investment Criteria (summary) (max two (2) pages).

The GLOF-II project is contributing to increase resilience and enhance livelihoods of the most vulnerable people through effective adaptation measures, empowering beneficiaries to address disasters including GLOFs, thus contributing to a climate-resilient sustainable development in the long-term. The project remains aligned with GCF investment criteria and UNDP's strategic plan and Country Program document. The significance of adaptation and mitigation measures require to deal with climate change, and GLOFs, are high on the agenda of national and provincial Governments in Pakistan. The focus of the project is to strengthen communities in 18 districts of GB and KP. Approximately 696,342 people will benefit from the project, of which 50% are females - once all interventions are implemented. The project interventions include (i) protective infrastructure, (ii) rehabilitation/construction of resilient irrigation channels, (iii) supporting slope stabilization and bioengineering measures, (iv) establishment of community-based disaster risk management cells, (v) strengthening sub-national institutional capacities to plan and implement climate change resilient development pathways, (vi) upscaling community based EWS and long-term measures to increase communities' adaptive capacity. To build institutional capacities, Climate change adaptation action plans were drafted in both provinces to streamline procedures for effective DRM response and recovery while also embedding GLOF risk reduction in planning. From the total committed co-financing of USD 280,946 (PKR 50,000,000) by the provincial government of Gilgit-Baltistan (GB), USD 49,201 (PKR 8,756,302) has been materialized in 2021 for project management support activities. Project provided support to all relevant institutions including MoCC for better planning and effective disaster risk mitigation. All key partners were consulted individually as well as collectively to gain an in-depth understanding of the needs and the direction to be adopted to fulfill those needs and achieve targets.

The most significant outcome for the project was the completion of the competitive bidding process for procurement of the Early Warning System (EWS). During the reporting period, the project experienced some delays due to imposition of restrictions due to COVID-19, however project was able to achieve 60% delivery (USD 6.2 million out of USD 10.27 million). Furthermore, multiple studies and baseline assessments were completed to provide baseline for effective planning and implementation including HVRAs, KAP studies, and socio-economic impact of GLOFs. The comprehensive Environmental and Social Management Plan ESMP has been made to promote sustainable adaptation measures and Gender Strategy and Action Plan also provided a baseline for effective gender inclusion and empowerment to strengthen impact of project interventions; project ensured at least 30% women participation in all activities. The monitoring and evaluation aspect of the project was improved using monitoring tools and regular visits to observe the ongoing activities and assess the benefits accordingly. The impact of project activities and interventions resulted in a meaningful paradigm shift, enabling the long-term resilience of the region through policy reforms, and building community resilience by implementing hard and soft activities such as construction of irrigation channels, slope stabilization through plantation and bioengineering and initiation of small-scale infrastructure. These hardcore activities of the project are further producing significant co-benefits in terms of income and business generation by providing employment opportunities to local labor. Implementation of communications and advocacy strategy achieved through launching social media channels, public service messages, consolidation of IEC material, provision of trainings and awareness/capacity building sessions for stakeholders and communities further aided in effective outreach to the masses.

2.2.1 Impact Potential (max one (1) page).

The context of project impact remains aligned with the GCF investment criteria, as well as UNDP's 'Strategic Plan (both 2017-2021 strategic plan and 2022-25 strategic plan) and UNDP's 'Country Program Document 2017-2022.' Issues related to climate change and GLOFs remain high on the agenda of national and provincial Governments in Pakistan.

As per approved Funding Proposal, the project aims to contribute to fund level impact of increased resilience and enhanced livelihoods of the most vulnerable people affected by climate-related disasters and variability through demonstrated adaptation measures, empowering beneficiaries to address climate-induced disasters including risks from GLOFs. Project interventions have been tailored to address climate change impacts and GLOF risks by preventing loss of lives and establishment of community infrastructures, based on a holistic approach in all glaciated districts in Gilgit-Baltistan (10) and Khyber Pakhtunkhwa (08), thus contributing to climate-resilient sustainable development in the long-term. The project is estimated to benefit 696,342 beneficiaries (348,171 women and girls and 348,171 men and boys) and enhance resilience through timely and early warning of extreme events, promoting adaptive solutions – such as through provision of protective infrastructure, rehabilitation/construction of resilient irrigation channels; supporting slope stabilization and bioengineering measures and establishment of community-based disaster risk management cells to strengthen disaster risk mitigation and response. Once the interventions are in place, the impact of the project is

expected to benefit a much wider population (approximately 29,233,000 indirect beneficiaries) beyond the targeted valleys through better outreach and communication channels and enhanced awareness on climate change. Overall, the project is expected to benefit about 15% of the total population of Pakistan - estimated at 197 million in 2017 (World Bank).

The project has introduced monitoring tools such as trackers, Gantt charts and mapping templates to keep track of project interventions, beneficiaries, and impacts. Regular project monitoring and evaluation activities (spot checks, monitoring visits, third-party inspections), as well as mid-term and terminal evaluations will assess and document the extent to which specific project stakeholders are benefiting from the project. During the reporting period, the project completed 160 Hectares of slope stabilization, which will in turn address the risks of landslides and flashfloods and protect valuable agriculture land and infrastructure – benefitting 13,7215 males and 40,659 females. Similarly, 28 irrigation channels were completed in 07 valleys, benefitting 4,221 males and 4,116 females through increased access to irrigation water and enhanced productivity. The project also enhanced capacity of communities and stakeholders to cope with impacts of climate change through imparting 51 trainings in both KP and GB - benefitting 1,080 males and 529 females; 71 community mobilization sessions benefitting 1,598 males and 571 females; 43 mock-drills benefitting 1,395 males and 743 females. The proposed revision of costs and targets (in the inception report and Baseline Assessment report will not have any impact on the benefit streams to project stakeholders.

2.2.2 Paradigm shift potential (max one (1) page).

The project encompasses a holistic model of climate-resilient development that enables 18 districts of Pakistan to manage the risks from GLOFs and other impacts of climate change, incorporating top-down regulatory support, bottom-up community preparedness and long-term planning for sustainable and climate-resilient use of natural livelihood assets. The 18 project districts cover 99% of the glaciated area of Pakistan and targets all those communities which are currently most vulnerable to GLOF events. It is estimated that the benefits to be achieved from avoided loss of life and property and livelihoods developments will continue to increase over 25 years, with an overall economic internal rate of return (IRR) for the project of 15% suggesting that the activities will catalyze impacts well beyond the scope of the 7-year project.

The impact of project activities and interventions resulted in a meaningful paradigm shift, enabling the long-term resilience of the region through policy reforms, and building community resilience. In 2021, 28 irrigation schemes were rehabilitated/reconstructed, which will not only enhance community resilience against GLOFs but also provide livelihood opportunities for the locals through provision of irrigation water for agriculture. The 160 Ha of slope stabilization completed in 2021 will help control storm water runoff through reduced erosion and mitigate impacts of flooding on communities. Furthermore, employment opportunities are created for local communities by engaging them in implementation of activities. At the local level, the project strengthened the already established CBDRM committees through 42 trainings to build capacities for enhanced understanding of GLOF risks and project interventions. 71 community mobilization sessions and 43 mock drills were also carried out to equip them with adequate DRM procedures. The activities on indigenous best practices (1 glacier grafting and 2 ice stupas) also benefited local communities through engagement and imparting indigenous knowledge to promote sustainable practices and address the issues of water scarcity to become self-reliant. 4 trainings on disaster risk management were held for 150 key officials of district disaster management authorities along with community members to identify roles and responsibilities for planning and implementation of climate change adaptation and coping strategies on GLOF risk reduction. In line with the communications strategy, key messages were disseminated at national and provincial level (GB and KP) through several existing information-sharing networks and platforms. The project's social media channels were launched during the reporting period and these channels capture and disseminate lessons learned through regular updates, feeds and posts. This is helping raise awareness on concept of GLOFs and associated risks and management strategies vis' a vis' equipping the local communities for timely response to disasters. 1 journalist training was organized for local journalists from KP, GB and federal capital to train them on ethical reporting and photojournalism that enabled them to foresee climate change as a recurring phenomenon - which cannot be stopped rather managed through mitigation and adaptation. The CCAAP drafted for both provinces will enhance institutional capacities to streamline procedures for effective DRM response and recovery while also imbedding GLOF risk reduction in planning. A comprehensive environmental and social management plan has been put in place based on baseline assessment studies and stakeholders' consultation, which promotes sustainable adaptation measures, mainstreaming climate change risk mitigations and solutions at institutional level within sub-national line departments and environmental protection agencies. Likewise, the revised Gender Strategy and Action Plan encompasses roles and responsibilities aligned for effective gender inclusion and empowerment to strengthen impact of project interventions. Rigorous follow-up from departments for inclusion of women in all activities and gender sensitization of community has enabled understanding of inclusivity in the otherwise culturally sensitive areas

of project interventions. Project ensured that all CBDRMCs formed have active women representation and participation.

2.2.3 Sustainable development potential (max one (1) page).

The fundamental benefit of the project is based on the principle of saving human lives, livelihood, livestock and property. The project interventions will provide indirect employment opportunities to the local communities, helping to improve the socio-economic situation of these far-flung areas. The project also promotes slope stabilization through ecosystem-based interventions such as plantations and bio-engineering measures. The project is producing significant co-benefits in terms of income and business generation by providing employment opportunities to local labor through engagement in civil works such as construction, repair and rehabilitation of infrastructures and slope stabilization. Moreover, the project is building human resource capacity through provision of various community level and stakeholder trainings, improving quality of human life through addressing issues of water scarcity in the region by supporting indigenous practices and reversing environmental degradation through sustainable and climate-resilient land use through slope stabilization. The project is also enhancing women's participation through extensive sensitization activities which will continue till the end of the project - to ensure sustainability after project closure. The communities are also reporting improved agriculture production and crop yield as a result of provision of irrigation water resulting from rehabilitated irrigation channels.

Through the project, sub-national institutional capacities are being strengthened to ensure sustainability of project. To keep stakeholders involved and updated on project interventions, exposure visits were conducted for high ranking and mid-level officials. Numerous sensitization and awareness raising sessions were imparted for registered CBDRMCs to create awareness amongst stakeholders and also to ensure wellbeing of target communities by keeping them more informed and prepared. In compliance with the Gender Strategy and Action Plan, the project ensured at least 30% women's participation in all activities. The visibility of the project and its interventions has been enhanced through production of communication materials such as documentary clips and public service messages broadcasted on national and local media outlets, and snippets on social media channels. Various studies and baseline assessments were carried out to analyze the on-ground situation of target valleys for better integration into project planning for implementation—including HVRAs, KAP studies, socio-economic impact of GLOFs and Environmental and Social Management Plan. These studies not only assess environmental potential of the area but also provides recommendations on how to minimize impact through project activities on targeted land and its resources.

Both outputs of the project are aligned with and contribute to achieving the country's sustainable development agenda by strengthening sub-national institutional capacities to plan and implement climate change resilient development pathways, along with upscaling community based EWS and long-term measures to increase communities' adaptive capacity. In this regard, local government departments in 24 valleys were involved in supporting trainings and workshops at the district and federal levels, and stakeholders field visits were arranged to oversee project activities and meet with communities to share project results and impacts and to assess any improvements that may enhance effectiveness. This not only builds trust amongst government and the public but also help improve coordination between different local, provincial, and federal level institutions for streamlining processes. Various trainings imparted to CBDRMCs on Basic Life Support (BLS), Medical First Aid (MFA) and Emergency Response (ER) has helped them understand disasters and learn vital skills that can be used to help save lives. The feedback received from communities indicate confidence to perform basic search and rescue activities during disaster situations, treat the injured using first aid, and help them relocate to safer zones. In lieu of the emergency declared at Shisper Glacier, Hunza in early 2021, the project provided support to PMD for installation of an AWS to monitor the weather patterns for better forecast of any unforeseen event in the region, formed and trained CBDRMC and conducted mock drills to prepare them for timely response to GLOF events.

2.2.4 Needs of the recipient (max one (1) page).

Pakistan's National Climate Change Policy (NCCP) recognizes climate change as one of the key threats to national development and economic growth. The policy also identifies various thematic areas and prescribes both adaptation and mitigation measures. The NCCP puts more focus on adaptation in light of Pakistan's high vulnerability to extreme weather events and other adverse impacts of climate change. The government has further emphasized on mainstreaming climate change into various sectors and has drawn up ambitious agenda on climate change. The project supported various plantation activities to support the "Adopt a Tree" campaign that contributes towards Vision 2025 of the Government of Pakistan. In alignment with the Government of Pakistan's agenda of increasing

forest cover, the project supported 160 ha of slope stabilization and bioengineering measures in-08 valleys of GB and 1 valley of KP utilizing local and indigenous species, which has helped the local environment in terms of increased vegetative cover and reduced soil erosion. Furthermore, the Project is providing support to national and subnational institutions including MoCC for better planning and effective disaster risk mitigation.

The project also continues to strengthen capacities of District Emergency Response Cells at the provincial level through provision of rescue and relief equipment; and of communities through establishment of community-based hazard watch groups, mock drills, and disaster risk management trainings. Likewise, stakeholder exposure visits to the target areas helped strengthen ownership of the government and increase trust of local communities on their government counterparts. Media outreach through training of journalist and developing synergies with local and national print and electronic media has greatly helped advocate climate action agenda of Pakistan's government. The Disaster Risk Management trainings has enhanced the capacity of government departments in imparting awareness on early, effective, and efficient response and preparedness. The project has also supported the participation of senior government officials in the 26th session of the Conference of Parties (COP26) , celebration of World Environment Day, International Mountain Day and International Day for Disaster Risk Reduction. This has enhanced visibility of the project, the government, GCF and UNDP in our combined efforts to combat climate change. Extensive outreach activities were carried out through full-fledged media campaign, included broadcasting of the project documentaries and public service messages by key government and UNDP officials in print and electronic media to sensitize the masses on the impacts of GLOFs and climate change and the steps to cope with the resulting disasters.

2.2.5 Country Ownership (max one (1) page).

As the project aims to scale up activities implemented under previous interventions, consultations were carried out with diverse stakeholders including government ministries and departments, civil society, private sector and development partners to incorporate their inputs and feedback into the development of the project. All key partners were consulted individually as well as collectively to gain an in-depth understanding of the needs and solicit ideas on how the needs could be addressed through the project. The provincial government of Gilgit-Baltistan (GB) committed co-financing of USD 280,946 (PKR 50,000,000) for the project out of which USD 49,201 (PKR 8,756,302) has been materialized in 2021 for project management support activities.

Climate change issue was and remains among top priorities for both the national and provincial governments. However, the project has suffered initial delays in implementation due to disagreement on implementation modality with the Implementing Partner and frequent transfers of relevant authorities within partner organizations. Nonetheless, UNDP has been systematic in its efforts to speed up implementation and kept all partners regularly updated with regards to project progress. This has aided in resolving bottlenecks and challenges during implementation in 2021.

All activities in AWP 2021 were approved after close consultations with officials of MoCC and Project Steering Committee (PSC) under the chairmanship of the Secretary MoCC and including key government departments at federal and provincial levels. To expedite implementation of AWP 2021, LoAs were signed with the governments of GB and KP as per the activities endorsed in the PSC, whereas on-file approvals were granted for all activities to be undertaken under UNDP support services as approved in AWP 2021. Regular meetings were facilitated between UNDP and the National Project Director to keep the IP involved and informed of project progress. Regular updates are also shared with concerned officials to provide updates on field activities as well as on future plans. Alongside, all executing agencies are involved from the start of each activity and proper roles and responsibilities are assigned for effective execution.

Since most activities are implemented at the provincial level, the responsible partners and line departments are kept in the loop in all correspondences, with regular provincial project steering committee meetings and project progress review meetings. LoAs were signed with the provincial governments, giving them full ownership of the project with oversight provided by project staff for any technical and financial hurdles posing delays in delivery.

2.2.6 Efficiency and Effectiveness (max one (1) page).

During the reporting period, the project experienced some delays due to imposition of restrictions due to COVID-19. Despite this, most of the activities outlined in AWP 2021 have been implemented.

The project mobilized all relevant stakeholders at federal and provincial level. However, transfer of resources for the agreed set of activities to the provincial government departments was delayed due to the delayed receipt of 2nd disbursement in Q2. Hence, the provincial government line departments started actual work on the previously identified potential sites to construct small-scale infrastructure, repair/rehabilitate irrigation channels and slope stabilization in Q3/Q4. At the federal level, the project maintained good relationship with MoCC, UNDP, PMD and other relevant stakeholders and conducted activities as proposed in the 2021 AWP. The competitive bidding process for procurement of the Early Warning System (EWS) was initiated by UNDP and completed within time. Despite the long time taken due to change in procurement process (from UNDP LTA to an open bidding process) the project was able to complete the procurement process within the reporting period and resulted in best value for money.

As per the recommendation of the Interim Evaluation conducted in June-September 2020 a request for 18-months extension was submitted to GCF in June 2021 and approved in Aug 2021. The disbursement schedule was reassessed by UNDP and re-scheduled to align with the 18-month extension of the project

To mobilize local communities in the target valleys, the remaining community-based disaster risk management committees were established by the project and equipment and trainings on Disaster Risk Management were provided to the HWG. These organizations were registered through coordination with Social and Welfare Departments of KP and District Administration in GB. The outreach and awareness activities carried out under the project have also amplified the effectiveness of the project. The project's emphasis on messaging through visual communication on local channels and digital media have greatly enhanced visibility and effectiveness of the project.

The project delivered USD 6.2 million (60%) against planned budget of USD 10.27 million. A co-financing of USD 51,717 has been materialized to date by the government of Gilgit-Baltistan – corresponding to PKR 9,204,074 (@PKR 177.97/1 USD as of 2021). At the time of submission of funding proposal, the Government of Pakistan had committed to a co-financing amount of PKR 50,000,000 which translates to USD 478,102.88 (@PKR 104.58/1USD). It is to be noted that dollar exchange rate vis-a-vis Pak Rupee continued to fluctuate in 2021 closing at PKR 177.97/1 USD. Against the current exchange rate, the total committed amount translates to USD 280,946.

2.3 PROJECT OUTPUTS IMPLEMENTATION STATUS			
Project Output	Project Activity	Status ³	Implementation progress (%)
Output 1 Strengthened sub-national institutional capacities to plan and implement climate change resilient development pathways	Project Activity 1.1 Provincial line and planning departments have technical capacities to mainstream CC into development plans	<i>Activity Started - progress delayed</i>	89%
	<p>In 2021, the project has either initiated or completed activities which were pending until 2020, including drafting of provincial Climate Change Adaptation Action Plans (Action 1.1.1.j), forestry surveys for GB (Action 1.1.1.h), assessment of potential socio-economic impact of GLOFs for GB (Action 1.1.1.c) and the KAP study for GB (Action 1.1.1.b) for valley level intervention. Individual experts (Action 1.1.1.d, e and f) (Safeguard Specialist, Digitization Expert, Development Expert, Legal Expert, DRR Specialists Glaciologist, Provincial Technical Experts on Climate Change Adaptation, DRR Specialists, Civil Engineers and Bio-Engineering Consultants) were brought onboard to facilitate implementation. GIS mapping of hazard communities (Action 1.1.i.g) for the remaining 12 valleys was completed. The details on safeguard related to above activities is provided in section 4.1 and 4.3 below.</p> <p>The update of activities undertaken in 2021 is given below:</p> <p>-Action 1.1.1.a - Hazard, Vulnerability Risk Assessments (HVRA) of target valleys (12 valleys) in GB, in line with criteria for HVRA</p> <p>-Status:</p> <p>- For GB, Hazard, Vulnerability and Risk Assessments (HVRA) out of the total target of 16 valleys, 09 were completed by Gilgit Baltistan Disaster Management Authority (GBDMA) in 2021, whereas 07 were completed in 2020. The study was conducted to systematically evaluate the damage that could be caused by a potential disaster, the severity of the impact, and the available resources to reduce vulnerability and increase capacity to cope with disasters. The mitigation strategies will be proposed in line with the HVRA. For KP, out of a total target of 08 valleys, HVRA for 03 valleys has been completed by the Provincial Disaster Management Authority (PDMA-KP) in 2021, whereas 05 were completed in 2020.</p>	<p>In 2022, the project plans to complete remaining KAP studies, assessment of potential socio-economic impact of GLOFs, forestry/environmental conservation surveys, hiring of technical experts and consultants, documentation, and demonstration of indigenous best practices, review and approval of the draft CCAAPs submitted, field missions, implementation of social safeguard and grievance redress mechanism, implementation of Project Gender Action Plan and Strategy, improve financial capacity to adapt to GLOFs through developing community guidelines/manual for kitchen/home gardening, and designing Project Exit Strategy for 2023 for smooth transition of knowledge, assets and experience to the community and government for long-term sustainability of project interventions. The remaining activities carried forward from AWP 2021 are highlighted below:</p>	

³Activity Not Yet Due; Activity Started -ahead of schedule; Activity started – progress on track; Activity started but progress delayed; Activity start is delayed.

	<p>-Action 1.1.1.b – Knowledge, Aptitude and Practice (KAP) Study of 24 targeted valleys in (08) KP and (16) GB, in line with criteria for HVRA</p> <p>-Status: Knowledge, Aptitude and Practice (KAP) Studies for 16 valleys in GB was achieved in 2021, of which 9 were completed by Karakoram International University (KIU) and 7 by University of Baltistan (UoB) - to collect and analyze primary data about KAP of the communities of target valleys about GLOFs. This primary data was collected through questionnaires, focus group discussions (FGDs) and field observation. For KP the KAP study for 8 valleys is being carried forward to AWP 2022.</p> <p>- Action 1.1.1.c - Assessment of potential socio-economic impact of GLOFs, and development of socio-economic profiles of 24 target valleys (16 GB and 08 KP)</p> <p>-Status: - For GB, the assessment of potential socio-economic impact of GLOFs, a total of 16 valleys was achieved in 2021 of which 9 were completed by KIU and 7 by UoB. - The socio-economic impact assessment for the 8 valleys in KP is carried forward to AWP 2022.</p> <p>-Action 1.1.1.d – Individual Consultants-Subject specialists; National Technical Expert on Climate Change Adaptation ; 01 Safeguard specialist ; 02 Digitization Expert ; 04 Legal Expert ; 01 Development expert ; 01- Bio Safety consultant; 01- Consultant market survey; 03- Communication consultants ; 01- Media consultant</p> <p>-Status: - The following Individual consultants/subject specialists were recruited at MoCC/PMU level, Islamabad: 2 Legal Experts (for support to MoCC on legal matters), 1 Development Expert (for technical support to MoCC/UNDP on development portfolio) and 1 Digitization Expert (for scope development for GIS based MIS firm and coordination with MoCC digital interventions). Under the revised AWP 2021 approved in December 2021, the following additional positions were also added - 1 Market Survey consultant (for relocation of PMU office), 1 Media consultant (for conducting journalist trainings) and 3 Communication consultants (1 support to MoCC, 1 for providing support to KP, and 1 for GB).</p> <p>-Action 1.1.1.e 01 Provincial Technical Expert on Climate Change Adaptation; 01 Glaciologists; 01 DRR Specialist; 02 Civil Engineer; 02 Bio-Engineering Consultant</p> <p>-Status: -The following Individual consultants/subject specialists were recruited in KP to expedite on-the-ground technical activities - 1 Glaciologist, 1 Civil Engineer and 1 DRR Specialist. However, the position of 1 MIS Officer has been adjusted by PDMA. The forest department KP requested to utilize the inhouse capacity hence hiring of Bio-Engineering Consultant was not required. All these experts were involved for site identification and assessments, designing of structures and BoQs and construction of on-ground activities.</p>	<p>Action 1.1.1.b The KAP study for 08 valleys of KP will be completed in 2022 since the TORs were finalized only in Q4 2021</p> <p>Action 1.1.1.c The socio-economic impact assessment for the valleys in KP will be carried out in 2022, as the TORs were finalized only in Oct 2021.</p> <p>Action 1.1.1.e: KP: the KP govt has requested that instead of climate change expert, 6 research associate may be hired in 2022. In 2022, some important activities of the project will be implemented. Hence 2 Civil Engineers and 4 Sub engineers will be recruited by PDMA to expedite implementation and conduct monitoring of infrastructure work.</p>
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	<p>-Action 1.1.1.f - 01 Provincial Technical Expert on Climate Change Adaptation; 01 Glaciologists; 02 DRR Specialist; 02 Civil Engineer; 02 Bio-Engineering Consultant</p> <p>-Status:</p> <p>The following Individual consultants/subject specialists were recruited in GB to expedite on-the-ground technical activities - 1 Technical Expert on Climate Change, 1 Glaciologists, 1 DRR Specialist, 1 Civil Engineer, and in place of the second DRR Specialist, 1 DRR Assistant, 1 GIS Expert were hired. The forest department has hired a Bio-engineering firm in place of 2 Bio-engineering consultants. All these experts were involved for site identification and assessments, designing of structures and BoQs and construction of on-ground activities.</p> <p>- Action 1.1.1.g - GIS Mapping of Hazard community (Contractual services-companies for GIS mapping of potential hazard locations (GLOF lakes) and selection of project sites/ interventions</p> <p>-Status:</p> <ul style="list-style-type: none"> - For GB, GIS mapping of vulnerable communities of 9 highly vulnerable valleys of GB was completed by KIU. These GIS maps will assist planning agencies to develop strategies for disaster management as well as enhance awareness of communities living in those areas. - For KP, the GIS maps for 03 notified valleys has been completed by Provincial Disaster Management Authority. <p>- Action 1.1.1.h - Forestry/environmental conservation surveys of project sites and develop conservation plan (forest, rangelands, biodiversity, Conservation, restoration/repair of 12 conservation sites, 3 Number of consultants (1 Forestry, 2 Conservation/Biodiversity)</p> <p>- Status:</p> <ul style="list-style-type: none"> - For GB, the forestry survey activity has been completed. The activity of restoration of conservation sites was put on hold in both the provinces due to limited funds available initially and due to more emphasis accorded on other key project interventions in the latter half of the year. <p>- Action 1.1.1.i- Documentation and demonstration of indigenous best practices (1 demo in KP) for GLOF risk reduction and climate change adaptation in target valleys and districts of KP</p> <p>- Status:</p> <ul style="list-style-type: none"> - For GB, under the documentation and demonstration of indigenous best practices, a documentary and detailed report on Glacier Grafting has been submitted by KIU. For Glacier Grafting activity this year in Baltistan region, 03 activities were conducted in Baltistan region that includes 01 Glacier Grafting and 02 activities of Ice Stupa that are both techniques of forming artificial glaciers by locals. - For KP, the draft ToRs for the activity are yet to be finalized hence the activity will be carried forward to 2022. <p>- Action 1.1.1.j- Preparation and Review of Integrated National and Provincial Climate Change Adaptation Plan (CCAAP) – (1 KP and 1 PMU) (USD 20,000 PMU and USD 20,000 KP)</p>	<p>Action 1.1.1.f: GB: Similar to the above, it is planned to hire 2 Civil Engineers and 10 Sub engineers to expedite the implementation and robust monitoring of infrastructure work.</p> <p>Action 1.1.1.h. Forestry survey for KP and conservation of 2 sites in GB and 2 in KP will be implemented in 2022.</p> <p>Action 1.1.1.i The activity for documentation and demonstration of indigenous best practices for KP will be carried out in 2022.</p>
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	<ul style="list-style-type: none"> - Status: - For GB, the final draft of Climate Change Adaptation Action Plan (CCAAP) has been submitted which will be approved in Q1 2022. - In KP, the final draft of Climate Change Adaptation Action Plan (CCAAP) has been submitted which will be approved in Q1 2022. - Action 1.1.1.k - 50 Federal Government field missions (Support to MoCC, UNDP, Federal Ministries for Field Missions) - Status: - Federal Government field missions were organized on need basis only. Out of 50 only 10 field missions were carried out to monitor the implementation work in the field. (1 SAPM, 3 NPD, 2 PMD and 4 UNDP: RR, DRR, Technical Specialist, Program Officer ECCU). During their visit, meetings were held with senior government officials, stakeholders as well as community members to incorporate their feedback for smooth progression of project. 	<p>Action 1.1.1.j- The activity on preparation and review of Integrated National and Provincial Climate Change Adaptation Plan (CCAAP) for KP will be implemented in 2022 as there were delays in hiring of the consultant by KP EPA.</p> <p>Action 1.1.1.k – A Number of Federal Government field missions were curtailed due to Covid-19 travel restrictions and repeated onset of COVID-19 strains hence they will be carried forward to 2022.</p>		
	<p>Project Activity 1.2 Sub-national institutions coordinate effectively to implement CCA action plan and CCA initiatives</p>		<p>Activity Started - progress delayed</p>	<p>82%</p>
	<p>In 2021, the project has either initiated or completed activities which were pending until 2020. To maintain ownership and linkages with the provincial stakeholders, 2 stakeholder exposure visits to GLOF implementation sites and vulnerable communities involving national and sub-national officials were conducted in 2021 (Action 1.2.1.f). Media awareness campaign (Action 1.2.1.j), procurement of visibility and outreach material (Action 1.2.1.i) and production of articles/materials along with short video clips (Action 1.2.1.g) was conducted; whereas the project launched its social media channels to regularly update and dissemination information for public and stakeholders. The recruitment of a firm was completed for the establishment of integrated GIS based Management Information System at national and provincial level (Action 1.2.1.e) .</p> <p>The update of activities undertaken in 2021 is as follows:</p> <ul style="list-style-type: none"> - Action 1.2.1.a – 05 No. of Training of MoCC, P&DD (KP & GB), line departments and Communities on Climate Change Adaptation Action Plan and Climate Resilient Development Pathways (01 Federal, 02 KP and 02 GB) - Status: - Trainings could not be held on Climate Change Adaptation Action Plan and Climate Resilient Development Pathways as the provincial Climate Change Adaptation Action Plans for GB was finalized in Q4 of 2021 and for KP it will be finalized by Q1 of 2022. 	<p>Trainings and capacity building sessions on CCAAPs, establishment of GIS based MIS system, stakeholder exposure visits, media awareness and outreach campaigns, short video clips are planned for 2022. The remaining activities carried from AWP 2021 are mentioned below:</p>		

	<p>-Action 1.2.1.b - Mapping through SUPARCO on impacts of climate change on MOCC interventions and assessment of vulnerable Glacier for GLOF</p> <p>-Status: -Mapping through SUPARCO on impacts of climate change on MOCC interventions and assessment of vulnerable Glacier for GLOF. An MoU has been signed between MoCC and SUPARCO for the use of satellite imagery. To date only one payment request has been received by the project from SUPARCO against the activities undertaken in 2021.</p> <p>-Action 1.2.1.c – Strengthening of GIS Lab (IT (USD - 50,000), repair/renovation work (USD 75,000) and Furniture (USD 50,000) for (P&DD, PDMA, EPA/Forest/ PMD - Linkages)</p> <p>-Status: -This activity could not be carried out in 2021 since it is linked with the establishment of integrated GIS based MIS lab at the Federal level for which the process of recruiting a firm has been completed.</p> <p>- Action 1.2.1.d – Strengthening of CC at National and Provincial Level: Procurement of Furniture for MoCC/CC Cell</p> <p>- Status: - The activity of strengthening Climate Change cells at the federal and provincial level through the provision of furniture has been completed.</p> <p>- Action 1.2.1.e - Establishment of Integrated GIS based MIS (Digital Platform) at National and Provincial Level (Operation Cost: USD 25,000; and USD 175,000)</p> <p>- Status: - The hiring process of the firm for establishment of GIS based MIS has been completed. The portal will be established in 2022.</p> <p>- Action 1.2.1.f –Stakeholders' exposure visits to GLOF implementation sites and vulnerable communities involving national and sub-national officials, NGOs, media, donors (2 visits each quarter – 1 to KP and 1 to GB)</p> <p>- Status: - 2 Stakeholders' exposure visits to GLOF implementation sites and vulnerable communities involving national and sub-national officials, were carried out. In Q1, Hindukush Snow Sport Festival (HSSF) 2021 was held from 29th to 31st January 2021 in the valley of Madaklasht, Chitral KP, with over 200 participants; of which a Stakeholder Exposure visit by NPD was also an augmented segment. 1 more stakeholder exposure visit was conducted in Q4 (November) of 2021 in which over 17 KP Government officials from different line departments were taken to GB to project sites to interact with communities.</p>	<p>Action 1.2.1.a – The trainings for federal and provincial officials and communities will be conducted in 2022. The project will plan for trainings to be organized at provincial and federal level in Q2, 2022.</p> <p>Action 1.2.1.b: This was an activity to provide support to MOCC through aerial imagery for interventions including glacier melting and tree plantation. The activity will be continued in 2022.</p> <p>Action 1.2.1.c - GIS labs at the provincial level will be strengthened in 2022 once the integrated GIS based MIS lab is established at Federal level. The activity will be carried out in 2022.</p> <p>Action 1.2.1.e: The activity for establishment of GIS based MIS will be implemented in 2022.</p> <p>Action 1.2.1.f: No visit for GB stakeholders could be conducted in 2021 hence the activity is planned for Q1 of 2022.</p>
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	<p>- Action 1.2.1.g –04 Number of Short Video Clips to record community level interventions, GLOF Events and Project infrastructural activities - Success Stories and Lessons Learnt</p> <p>- Status: -For recording community level interventions, GLOF events and project infrastructure activities, a firm has already been hired and the work is in progress. Concept notes for the docu-series have been shared for review. Due to inaccessibility to the project's snowbound areas, the activity will be carried forward to 2022.</p> <p>- Action 1.2.1.h – Website - Maintenance and Support Services</p> <p>- Status: - Revamping of website to integrate grievance redress mechanism, deployment of Project Monitoring Information System, MS-Project and linking with Ministry's GIS-MIS system is carried forward to 2022.</p> <p>-Action 1.2.1.i - Design and printing of visibility and outreach material -(Design and printing - Brochures, Pamphlet, 2 banners/sign boards, 2 leaflets/flyers, 1 Illustration/comic books, 1 travel information booklet on glaciers of Pakistan, merchandise items, graffities, public art installations, consultant reports, etc.)</p> <p>-Status: -Under the activity of design and printing of visibility and outreach material, publications and material have been printed for COP26, World Environment Day, UN-Day, International Day for Disaster Risk Reduction, National Disaster Resilience Day, International Mountain Day, for awareness to communities and stakeholders regarding GLOF and relevant information on climate change. This includes 1 booklet on Ice Stupas, 1 Valley Information booklet, 1 project brochure, 2 project infographics (1 on project interventions and 1 on valley selection criteria), 1 DRM manual, 3 3D acrylic cutouts of AWS and 1 Coffee Table booklet. 6 poster of GLOF interventions, 1 mascot, 6-character illustrations done for animations. Information boards for 05 valleys of KP have been installed in 10 locations, whereas the printing for 7 boards for GB is complete. However, the installation will be done once the valleys are accessible. Designing material for final year publications and merchandise is ongoing.</p> <p>-Action 1.2.1.j- Media awareness campaign (4 – capacity building trainings for journalists on climate change, 4 – press articles/photojournalism, 2 – panel discussions, 1 bloggers/ vloggers tours for documentation of target areas, production of 4/month – radio/TV alerts, programs, 4 – articles/Op-Eds, 4 – photo-stories, 4 – blog/success stories, 30 – awareness tickers/videos through electronic media, 1 VR film for stakeholder sensitization showcasing GLOF,)</p> <p>-Status: -Under media awareness campaign, 1 training has been provided to journalists from KP, GB and federal capital from 21st - 24th November in Hunza, GB. Multiple success stories have been published in electronic and print media (1 article in Dawn News on Irrigation Channels in KP, 1 blogpost in Express Tribune GB, 1 on valley selection criteria in both KP and GB, 1 photo story on UNDP exposure, 1 article on Shisper surge and</p>	<p>Action 1.2.1.g – The activity on communication and knowledge management will continue in 2022.</p> <p>Action 1.2.1.h – The activity on website maintenance and support services will continue in 2022.</p> <p>Action 1.2.1.i - The activity of design and printing of visibility and outreach material is a recurring activity, hence will continue in 2022.</p>
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	<p>project interventions in DAP magazine). Awareness and IEC material has been published and circulated during stakeholder exposure visits, events, trainings etc, throughout the year. 1 TEDx event organized with 4 speakers talking around the theme of climate change. 1 virtual photography/videography competition held for youth of GB and KP. 1 high profile panel discussion was held in Islamabad. Project updates were shared with media in the form of numerous press releases, 8 media interviews (02-TV, 03-Radio, 03-social media). 7 Public service messages were recorded for broadcasting on local and national TV channels on Environment Day, International Mountain Day, National and International Disasters days to raise awareness among masses regarding climate change and its adverse impact. 3 snippets created for social media (project overview, IDDR and valley selection).</p> <p>- Action 1.2.1.k – Action 1.2.1.k: 60 Number Of Project field monitoring visits to implementation areas and communities (PMU, PIU and FOs)</p> <p>- Status:</p> <p>- 115 field monitoring visits were conducted by the project team (PMU- 10; KP-40; GB-65) PMU: 04 visits were conducted by the NPM, 2 by M&E, 3 by finance team, 1 by communications team. GB: 12 field monitoring visits by PIU were conducted by the PIU monitoring and engineering staff and 53 monitoring visits were conducted by the field office to the project sites and communities in GB. KP: 13 field monitoring visits were conducted by the PIU monitoring and engineering staff and 27 monitoring visits were conducted by the field office to the project sites and communities in KP.</p>			
Output 2 Community-based EWS and long-term measures are scaled up to increase communities' adaptive capacities	Project Activity 2.1 Expanded weather surveillance and discharge measuring networks		Activity Started - progress delayed	45%
	<p>In 2021, the project has either initiated or completed activities which were pending until 2020. Procurement of Early Warning System equipment for 24 valleys (Action 2.1.1.c, 2.1.1.d) was completed in 2021. Training of District Disaster Management Authorities (Action 2.1.1.h), communities and other relevant stakeholders on roles and responsibilities, and implementation of EW strategies at district and local level was conducted in 2021.</p> <p>The update of activities undertaken in 2021 is as follows:</p> <p>- Action 2.1.1.a – 16 No. of Ground Truthing (visits) of Potentially Hazardous Lakes as identified in updated Glacier Inventory in KP and GB</p> <p>- Status:</p> <p>- No ground truthing was required during 2021 as the final glacier Inventory will be made available to the project by Q1 2022.</p>	<p>Installation of EWS, required equipment and devices for communication and data transmission, procurement of the remaining EWS, construction of base platforms for EWS and observatories, updating of glacier Inventory of Pakistan are planned to be completed in 2022. The remaining activities being carried forward from 2021 are highlighted below:</p>		

	<p>16 ground truthing visits of potentially hazardous lakes as identified in updated Glacier Inventory is no more required hence has been excluded from AWP 2022.</p> <p>- Action 2.1.1.b – Updating of Glacier Inventory of Pakistan</p> <p>- Status: To be carried forward to 2022 as PMD LOA was not signed with mutual agreement due to limited scope in 2021.</p> <p>-Action 2.1.1.c–50 Automatic Weather Stations (Inclusive of Equipment, Labor, Transportation, O&M) And -Action 2.1.1.d-408 River Discharge Gauges/Lake Monitoring Sensors (Inclusive of Equipment, Labor, O&M, Transportation)</p> <p>- Status: Open Bidding for 39 Automatic Weather Stations and 294 River Discharge Gauges/ Lake Monitoring Sensors has been completed on 8th Nov 2021 and purchase order has been issued on 28th December 2021.</p> <p>- Action 2.1.1.e – Construction of Base Platforms of EWS Equipment</p> <p>- Status: - The Design/BoQs for the base platforms were finalized by Pakistan Meteorological Department (PMD) for the construction of base platforms of EWS equipment and bidding was launched on 25th November 2021. The hiring of the firm will be completed by Q1 2022 therefore the activity has been shifted to AWP 2022. This is a mandatory activity for installation of EWS and was included as part of project budget submitted as part of extension request in June 2021.</p> <p>- Action 2.1.1.f- 12 No. of PMD Observatories and Maintenance of EWS Equipment in order to establish a robust and efficient EWS (USD 41,667 per observatory maintenance/repair work)</p> <p>- Status: -The Design/BoQs for the repair and maintenance of 12 PMD Observatories and 03 master control rooms are being finalized by PMD. Site visits have been conducted by project engineers and PMD officials to assess the repair works required. The hiring of a firm will be initiated in Q1 2022.</p> <p>- Action 2.1.1.g- EWS Communication (Equipment and Devices) and Data Transmission Cost (through Telecom Companies)</p>	<p>Action 2.1.1.b- The Activity on glacier inventory of Pakistan will be implemented in 2022</p> <p>Action 2.1.1.c & 2.1.1.d- Procurement for the remaining Automatic Weather Stations and River Discharge Gauges/ Lake Monitoring Sensors will be carried out in 2022. The Installation of the EWS procured in 2021 will also be done in 2022.</p> <p>Action 2.2.1.e. Construction of base platform for EWS equipment will be carried out in 2022.</p> <p>Action 2.1.1.f – The activity on 12 PMD Observatories and 03 master control rooms will be carried out in 2022.</p>
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<p><i>Project Activity 2.2 Early warnings are effective in protecting communities from climate-induced risks</i></p>		<p>Activity Started - progress delayed</p>	<p>96%</p>	

	<p>In 2021, the project has either initiated or completed activities which were pending until 2020. TED talk (Action 2.2.2.f) was conducted in the first quarter of 2021. 01 reciprocal visits for community members of KP (Action 2.2.2.e) to target valleys of GB was conducted in 2021.</p> <p>The update of activities undertaken in 2021 is given below:</p> <p>-Action 2.2.2.a – 96 No. of Community mobilization sessions in 15 target districts and 24 valleys for enhanced understanding of GLOF risks and project interventions (Communities, CBOs and Stakeholders Training and sensitization Workshops at Provincial level on CC Adaptation, GLOF risk reduction, Operations of EWS etc) (US \$ 70,000 KP, US \$ 80,000 GB)</p> <p>-Status:</p> <p>-Out of the total 96 sessions, 71 were conducted - details of which are as follows:</p> <p>GB: A total of 65 community mobilization sessions were conducted in 16 valleys of GB. A total of 1,980 community members (416 women, 1564 men) participated in these sessions. The focus of the mobilization is to form resilient societal setups by enhancing their capabilities to cope with disaster and also enable them to carry-out development interventions. A total of 9 CBDRMCs were formed in the newly notified valleys, out of which, 8 CBDRMCs (Shisper, Sosat, Arindu, Strangbut/Bashoo, Muthat, Parishing, Shimshal, Hisper) have been registered under Social Welfare Act while the registration of Haramosh valley is in progress. Overall, 42 trainings on various themes were organized to strengthen the CBDRMCs, where 1,125 participants (461 women and 664 men) attended.</p> <p>KP: A total of 6 community mobilization sessions were conducted, benefitting 189 community members (155 women, 34 men), 5 of which were exclusively for female community members. There were delays in initiating community mobilization activities in KP as there was no community mobilization consultant in place. The hiring of the services for community mobilization (female) was advertised in Q3, however insufficient number of applications were received hence the activity has been carried forward to 2022. 3 CBDRMCs in (Reshun, Kandia and Mankiyal) valleys have been formed. Registration with Social Welfare departments is in progress and will be completed in Q1 2022.</p> <p>-Action 2.2.2.b – Establishing SOP and conduct 48 No. of mock-drills in 24 targeted valleys and 15 Districts by engaging Stakeholders and communities (CBDRMC/TERC/HWG/CBOs etc) – (45,000 KP ; USD 55,000 GB).</p> <p>Status:</p> <p>Out of the total 48 mock drills, 43 were conducted - details of which are as follows:</p>	<p>Trainings on operations and maintenance of EWS, mock drills, communication and coordination/awareness workshops, development of remaining inter-agency multi-level SOPs/Plans for GLOF/Disaster risk reduction, stakeholders' communication and coordination workshops, reciprocal visits by community members to targeted valleys, community sensitization through media awareness are planned to be conducted in 2022. The remaining activities from 2021 carried forward to 2022 are highlighted below:</p> <p>Action 2.2.2.a – in 2022, the focus of the trainings to the communities will be primarily on operation and maintenance of the EWS. The activity for KP will be conducted through relevant department in 2022.</p>
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	<p>- For GB, SOP has been formed in coordination with Pakistan Red Crescent Society. 34 mock drill exercises in 16 valleys of GB have been conducted. A total of 1,459 community members (502 women, 957 men) benefitted from these sessions.</p> <p>In KP, 9 mock drills have been conducted in 3 valleys (Arkari, Madaklasht, and Reshun) individually and in 5 districts (Upper Dir, Lower Dir, Upper Chitral, Kohistan and Swat), benefitting 529 community members (418 males and 111 female).</p> <p>Action 2.2.2.c – 4 number of inter-agency multi-level SOPs/Plans Developed for GLOF/Disaster risk reduction (PMD, NDMA/PDMA/DDMA) i.e. Contingency Planning and Disaster Risk Reduction Planning (USD 25,000 GB, USD 25,000 KP)</p> <p>- Status:</p> <p>- Under the activity, out of 4 inter-agency multi-level SOPs/Plans for GLOF/disaster risk reduction, 3 have been developed.</p> <p>In GB, 01 monsoon flood contingency plan and 1 winter contingency plan were developed by GBDMA. Workshops were conducted in 10 districts for the formulation of these plans.</p> <p>In KP, 1 monsoon contingency plan has been completed by PDMA. SOPs developed have been tested in Upper and Lower Chitral. The five-year Provincial Disaster Management Plan was the second plan to be devised by PDMA, however the task could not commence in the reporting year hence will be carried forward to 2022.</p> <p>Action 2.2.2.d – 19 No. of Stakeholders' communication and coordination workshops organized at national, provincial and district level to share project success stories, challenges and way forward (2 – national level, 2 – provincial level, 15 – district/division level)</p> <p>Status:</p> <p>- No stakeholders communication and coordination workshops were organized at national, provincial or district level since the project had limited funds available until the release of second tranche by GCF in June 2021 due to which activities budgeted under this head could not be initiated. The focus of the project was on infrastructure activities during Q3 and Q4, hence this will be carried forward to AWP 2022.</p> <p>-Action 2.2.2.e – 12 No. of Reciprocal visits by community members to targeted valleys (delegations from 15 target districts visit other districts for learning from each other)</p> <p>-Status:</p> <p>-Out of 12 reciprocal community visits, only 1 was conducted for KP community to GB in which 20 community members from the target valleys of the project visited GLOF-II intervention sites in GB and met project stakeholders from the line departments as well as at community level counterparts.</p> <p>- Visits for GB community members could not take place and will be conducted in Q1 2022.</p>	<p>Action 2.2.2.b- The activity on conducting the remaining and additional mock drills will be continued in 2022.</p> <p>Action 2.2.2.c- The inter-agency multi-level SOPs/Plans development for GLOF/disaster risk reduction will continue in GB and KP in 2022. 1 Provincial Disaster Management Plan for KP will be prepared in 2022.</p> <p>Action 2.2.2.d- Stakeholder's communication and coordination workshops will be conducted in 2022.</p> <p>Action 2.2.2.e – The remaining reciprocal community visits will be carried out in 2022.</p>
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	<p>-Action 2.2.2.f - Awareness workshops at sub-national (University Graduates (15 No.) sponsored by GLOF-II Project for their research thesis on CC induced disaster (Particularly GLOF)), Capacity Building of the Stakeholders and Communities (30 - awareness workshops/seminars, /activities on GLOF adaptation and mitigation measures at national and provincial levels in Universities and Colleges/educational institutes , 2 – international environmental days celebrated at national and local level,)</p> <p>-Status:</p> <p>- The activity of awareness workshops/seminars along with support to research thesis on CC induced disaster (Particularly GLOF) at national and provincial levels in universities could not take place due to Covid-19 restrictions and intermittent closure of schools/Universities during the year. However, 4 international days were celebrated at national and local level. World Environment Day- (1 cycling event organized with MoCC and MoFA; talks arranged at KIU-GB), International Day for Disaster Risk Reduction, National Disaster Resilience Day-Seminar conducted in KP, International Mountain Day- speech and painting competitions held in KP, clean up campaigns held in both KP and GB, participation in Eco Film Festival where a stall was set up for the project and documentary screened. A 3-day avalanche preparedness training, 1 Seminar/training on CBDRR, CC and Eco tourism, 1 seminar/training on impacts of climate change, 1 Seminar/training on gender and sports under Hindukush Snow Sports festival was conducted.</p> <p>-Action 2.2.2.g – 30 – interns under “Nature/Climate Internship Programme”</p> <p>Status:</p> <p>- The activity of hiring 30 interns for MoCC has been completed. One of the priority areas of GoP is to create awareness among youth for climate change impacts. These interns served a dual purpose of not only providing youth the required exposure to climate change activities but also supported MoCC in implementation of other related activities.</p> <p>- Action 2.2.2.h -30 – interns under “Nature/Climate Internship Programme”</p> <p>- Status:</p> <p>- The activity of hiring 30 interns for P&DD KP has been completed. One of the priority areas of GoP is to create awareness among youth for climate change impacts. These interns served a dual purpose of not only providing youth the required exposure to climate change activities but also helped P&DD KP in implementation of other related activities.</p> <p>- Action 2.2.2.i - 40 – interns under “Nature/Climate Internship Programme”</p> <p>- Status:</p> <p>- The activity of hiring 40 interns for P&DD GB was completed in 2020 and the contracts ended in January 2021. One of the priority areas of GoP is to create awareness among youth for climate change impacts. These interns served the dual purpose of not only providing youth the required exposure to climate change activities but also supported P&DD GB in implementation of other related activities.</p>	<p>Action 2.2.2.f- The activity of awareness workshops/seminars along with support to research thesis on CC induced disaster (Particularly GLOF) at national and provincial levels in universities will be carried out in 2022.</p>
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	<p>-Action 2.2.2.j –Community Sensitization through Media awareness and Sensitization campaign at local and national level (16 - broadcasting of project documentary/video clips national and international channels, web series on individual markers, public service messages on GLOF/cc awareness, 16 broadcast– radio/TV alerts/ programs, 16 press adds/GLOF interventions in local/national newspapers/magazines/ digital media screens)</p> <p>Status: Under the activity of community sensitization through media awareness and sensitization campaign at local and national level; the project has launched 2 in-house documentaries and launched its own social media channels (Facebook, Twitter, Instagram and Youtube), public service messages developed for SAPM, RR, NPD, ARR for Disaster Day and International Mountain Day and shared on social media channel of GLOF-II and broadcasted 302 times on 8 national TV channels on International Mountain Day. Press ads were also published in national and local newspapers (7 on IDDR, 12 on IMD).</p> <p>- Action 2.2.2.k – United Nations volunteer (UNV) for Monitoring, Reporting, Coordination, Communication, Technical Assistance (10 No. of Volunteers i.e. 4 in KP, 4 in GB and 2 in PMU)</p> <p>- Status: - 15 UNVs have been hired for the purpose of monitoring, reporting, coordination, communication and technical assistance at PMU, PIU-GB and PIU-KP.</p>	<p>Action 2.2.2.j: Community Sensitization through Media awareness and Sensitization campaign at local and national level is a recurring activity and will continue in 2022.</p> <p>Action 2.2.2.k –UNVs will be retained in 2022.</p>		
	<p><i>Project Activity 2.3 Vulnerable communities have adequate long-term measures in place to address GLOF-related risks</i></p> <p>In 2021, the project has either initiated or completed activities which were pending until 2020. Construction, repair and rehabilitation of small infrastructure, irrigation systems, along with slope stabilization activities through bio-engineering structures (Action 2.3.1.a-c) were initiated/completed, details of which are provided below:</p> <p>- Action 2.3.1.a – 150 No. of Construction, repair and reconstruction of small-scale infrastructure to reduce medium- and long-term risks of floods (gabion walls, check dams, spillways) (GB 80 structures and KP 70 structures)</p> <p>- Status: - In GB, out of the 80 activities on construction, repair and reconstruction of small-scale infrastructure, the design and BoQs of 70 structures in 7 valleys were finalized by GBDMA and tenders have been awarded. Physical work for 46 schemes has commenced in Q4 2021 and are expected to be completed by Q1 2022. In KP out of the 70 structures, the design and BoQs of 27 structures in 5 valleys were finalized by PDMA and tenders have been awarded. Physical work for 27 schemes has commenced in Q4 2021 and are expected to be completed by Q1 2022. Work on the remaining schemes in GB and KP will be carried out in 2022.</p>		<p>Activity Started - progress delayed</p>	<p>64%</p> <p>The construction, repair, and reconstruction of small-scale infrastructure, irrigation systems, safe havens, safe access routes, and slope stabilization activities through bio-engineering structures, international study tours for communities, decision makers and technical experts, international exposure, outreach events, Third Party Monitoring and Validation of GLOF-II Project activities at implementation sites and other operational activities are planned to be implemented in 2022. The activities remaining from 2021 carried forward to 2022 are highlighted below:</p> <p>Action 2.3.1.a –200 number of small-scale infrastructures are planned to be completed in 2022.</p>

	<p>- Action 2.3.1.b – Slope stabilization activities through bio-engineering structures covering 350 Ha (350 ha i.e. 150 ha in KP and 200 ha in GB)</p> <p>- Status:</p> <p>- In GB, out of the total target of 200 ha, total 100 ha of land has been covered through slope stabilization activities by the Forest Department in (8 valleys in 5 Districts). The sub activities include 74,962 compact plantations, plantation of wattle fences, transplantation of sea-buckthorn, russian olive, rubinia, poplar sebiata etc., contour terracing and pasture improvement through sowing of Alfalfa. The remaining target will be carried forward to 2022.</p> <p>In KP, out of the total target of 150 ha, total 60 ha of land has been covered through slope stabilization activities through bio-engineering structures by the Forest Department in Swat District. The remaining targets will have to be carried forward to 2022.</p> <p>- Action 2.3.1.c – 150 No. of construction, Repair and reconstruction of irrigation systems, and installation of drip irrigation/sprinkler irrigation systems; water efficient farming technologies/ irrigation systems (GB 80 Schemes and KP 70 Schemes)</p> <p>- Status:</p> <p>- For GB, out of the 80 activities on construction, repair and reconstruction of irrigation channels, the design and BoQs of 44 structures in 11 valleys were finalized by Water Management Directorate. Physical work for 23 schemes has commenced in Q4 2021. Work on 1 scheme has been completed.</p> <p>For KP, out of 70 activities on construction, repair and reconstruction of irrigation channels, design and BoQs for 35 new structures were finalized by On-Farm Water Management, of which physical work on 27 new schemes was initiated. To date, 27 schemes have been completed including 14 new schemes and 13 schemes that were initiated in 2020 but completed by Q2 2021.</p> <p>Work on remaining schemes in GB and KP would be carried out in 2022.</p> <p>- Action 2.3.1.d – 02 International Study Tours for KP and GB (communities) (USD 100,000) and 2 International Study Tours for decision makers in provinces and Federal (USD 100,000), 1 and 1 International tour for technical experts (USD 50,000)</p> <p>- And</p> <p>- Action 2.3.1.e –International exposure and outreach events, conferences and summits for transboundary conservation, biodiversity, climate change, disaster risk reduction, climate financing etc. (TransParc Net, COP-26 etc.)</p> <p>- Status:</p> <p>- The activity on international study tours could not take place in 2021 due to Covid-19 related travel restrictions and limited visa regimes worldwide. Under approved revised AWP 2021, USD 60,000 from this activity was re-allocated for COP-26 to support MoCC, where the first day of COP26 was dedicated for GLOF-II project - contributed through presentations, documentaries, IEC material and the Nationally Determined Contributions was also launched.</p>	<p>Action 2.3.1.b- 540 Ha under slope stabilization is planned to be achieved in 2022.</p> <p>Action 2.3.1.c –182 number of irrigation schemes is planned to be completed in 2022.</p> <p>Action 2.3.1.d-International study tours will be planned and conducted in 2022 for both KP and GB depending on the COVID-19 situation.</p>
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	<p>- Action 2.3.1.f: Establishment/Construction/Repair of 48 No. of Safe Havens and Safe Access Routes in the vulnerable communities for rescue and response activities (02 sites per 24 Valleys)</p> <p>- Status:</p> <p>- For GB, based on HVRA, the sites have been identified for 7 valleys previously notified valleys (Badswat, Darkut, Barah, Khaplu, Ghulkin/Hussaini, Rupal, and Ghandus). The construction is carried forward to AWP 2022.</p> <p>In KP, 05 safe-haven sites in (Reshun, Arkari, Matiltan, Utror/Gabral) have been identified. The construction has been carried forward to AWP 2022.</p> <p>- Action 2.3.1.g: Third Party Monitoring and Validation of GLOF-II Project activities at implementation site</p> <p>- Status:</p> <p>- The activity of third-Party Monitoring and Validation of GLOF-II Project activities at implementation site was initially planned keeping in view that this was the last year of project implementation. However, since the project has been extended until Jan 2024 this activity is shifted to AWP 2022.</p>	<p>Action 2.3.1.e- The activity is carried forward to AWP 2022.</p> <p>Action 2.3.1.f The activity on establishment/construction/repair of safe heavens will be carried out in 2022.</p> <p>Action 2.3.1.g: Third Party Monitoring and Validation of GLOF-II Project activities at implementation site will be carried forward to AWP2022.</p>
	<p>Project Activity 2.4 Improved financial capacities to adapt to GLOFs and CC-induced risks</p>	<p>Activity Started - progress delayed</p> <p>74%</p>
	<p>In 2021, the project has either initiated or completed activities which were pending until 2020. Design/construction work on the strengthening of Rehabilitation Centers for the established CBDRMCs was initiated in 2021 (Action 2.4.1.b). The project is awaiting the decision of GCF on the proposal submitted for the realignment of community-based revolving fund.</p> <p>Details of activities undertaken in 2021 are as follows:</p> <p>- Action 2.4.1.a – Developments of alternate livelihood for improved financial capacity to adapt to GLOFs and CC-induced risks – 03 No. of Consultants</p> <p>- Status:</p> <p>- The activity of hiring 3 consultants for the Developments of alternate livelihood for improved financial capacity to adapt to GLOFs and CC-induced risks could not be initiated as this was linked with the revolving fund activity which is proposed to be reprogrammed, and decision on which is awaited from GCF.</p> <p>- Action 2.4.1.b –24 No. of construction/Reconstruction/Repair/renovation of Rehabilitation Centers (CBRMC) at the 12 No. targeted valleys to better respond to GLOFs and CC-induced risks/Disasters.</p> <p>- Status:</p>	<p>Development of alternate livelihood for improved financial capacity to adapt to GLOFs and CC-induced risks, construction/reconstruction/repair/renovation of CBDRM Centres and need based strengthening of 24 No. of Rehabilitation Centres is planned to be completed in 2022. Activities remaining from 2021 carried forward to 2022 are highlighted below:</p>

	<ul style="list-style-type: none"> - In GB for construction of CDRMCs, design and BOQs of CDRMC centers for 7 valleys were finalized by GBDMA and tender awarded for 6 valleys (Darkut, Rupal, Badswat, Ghandus, Khaplu, Barah; 1 for Shisper will be completed in Q1 AWP 2022). However, construction work will start from March 2022 owing to severe winter season in these valleys. Therefore, the activity is carried forward to AWP 2022. - In KP, contract has been issued by UNDP for the construction of 5 CDRMC centers. Sites of the CDRMC centers have been officially handed over to the contractors in 05 valleys (Kumrat, Madaklasht, Arkari, Matiltan and Utror/Gabral). Layouts have been done in all the valleys and physical works have been initiated in Madaklasht valley, however the remaining construction works will start from March 2022 owing to severe winter season in these valleys. Therefore, the activity is carried forward to AWP 2022. - Action 2.4.1.c –Strengthening of 24 No. of Rehabilitation Centers (CDRMCs) through Provision of IT Equipment and Furniture - Status: - The activity of strengthening 24 CDRMCs through provision of IT Equipment and furniture has been shifted to 2022 since it can only take place once the CDRMCs are constructed. - Action 2.4.1.d – Community based infrastructural/livelihood activities funds at 24 No. of Targeted Valleys in KP and GB through livelihood activities (USD 25,000 each valley) - Status: - The activity of Community based infrastructural/livelihood activities funds at 24 No. of Targeted Valleys in KP and GB has been highlighted by UNDP to GCF as an on-granting activity – which is not allowed as per current UNDP accreditation status with GCF. A formal decision is awaited from GCF on reprogramming of this activity. 	<p>Action 2.4.1.b and c – The activity on rehabilitation centers will be carried out in 2022.</p>
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2.4 PROGRESS UPDATE ON THE LOGIC FRAMEWORK INDICATORS⁴

2.4.1 PROGRESS UPDATE ON FUND-LEVEL IMPACT INDICATORS OF THE LOGIC FRAMEWORK

<i>Fund-level impact indicators⁵ (Adaptation)</i>	<i>Baseline</i>	<i>Current value⁶</i>	<i>Target (mid-term)</i>	<i>Target (final)</i>	<i>Remarks (including changes⁷, if any)</i>
<u>A1.0 Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions: 1.1 Change in expected losses of lives and economic assets (US\$) due to the impact of extreme climate-related disasters in the geographic area of the GCF intervention.</u>	<i>There are 33 potentially dangerous lakes in KP and GB. 960 destructive outburst floods are in KP and GB areas in last two decade</i>	<i>0</i>	<i>N/A</i>	<i>By the end of the project, 100% of households in KP and GB target communities are benefiting from engineering measures and early warnings in place to reduce the impact of GLOF events. (696,342 people: 348,171 men, 348,171 women)</i>	<i>Design and layout of EWS/AWS for 24 valleys was done, specifications were finalized for the equipment and the process of procurement for EWS completed in 2021. Installation of EWS will take place in 2022.</i>
<u>A2.0 Increased resilience of health and well-being, and food and water security: Indicator 2.4: Area (ha) of agricultural land made more resilient to climate change through changed agricultural practices (e.g. planning times, new and resilient native varieties, efficient irrigation systems adopted)</u>	<i>0</i>	<i>160 Ha</i>	<i><u>800 ha</u></i>	<i>2700 Ha</i>	<i>The activity under this indicator can only be implemented during limited time period from mid-December to mid-March due to weather conditions. After groundwork i.e. site selection, design and layout, 160 ha area has been planted and stabilised.</i>

⁴ Per the approved methodology in and the Logic Framework in the Funding Proposal, please provide an update on the relevant indicators.

⁵ As per the relevant indicators established in the Funding Proposal and the Performance Measurement Framework, including relevant updates agreed with GCF, if applicable.

⁶ As of 31 December of the relevant year.

⁷ Related to the approved indicators and targets in the Logic Framework.

2.4.2 PROGRESS UPDATE ON PROJECT/PROGRAMME LEVEL INDICATORS OF THE LOGIC FRAMEWORK ⁸					
Project/Programme indicators (Mitigation/Adaptation)	Baseline	Current value ⁹	Target (mid-term)	Target (final)	Remarks (including changes ¹⁰ , if any)
Indicator 1 (Outcome level) (Mitigation/Adaptation)					
A7.0 Strengthened adaptive capacity and reduced exposure to climate risks					
7.2: Number of males and females reached by climate related early warning systems and other risk reduction measures established/strengthened	GLOF early warning system in KP and GB covering two districts Vulnerable households are not able to receive and react to GLOF early warning messages in the KP and GB. No physical structures in place to mitigate the effect of GLOF events	1	-	By the end of the project, 100% of households in KP and GB target communities are able to receive and respond to early warnings and take the appropriate actions following the warning (348,171 men, 348,171 women).	The EWS/AWS procurement have been completed in Dec 2021 and will be installed in 2022 after which the local community can benefit from better communication and data transmission in place.
1. Strengthened sub-national institutional capacities to plan and implement climate change resilient development pathways.					
1.1. Strengthened institutional and regulatory systems for climate-responsive planning and development.	National, provincial and local disaster management institutions and development planners are unable to design, finance and analyze GLOF risk reduction measures on the basis of reliable, comprehensive information.	0	By the end of Year 3, 100% of the national and 90% of district and community authorities in the KP and GB regions are able to prioritize and plan measures to minimize potential losses from GLOFs.	By the end of the project, at least four policies have been adopted by Government to address or incorporate GLOF risk reduction	51 trainings were organized (community and stakeholders) in which 1609 participants attended (1080 men and 529 women), 71 community mobilization sessions with 2169 participants (1598 men and 571 women); 43 mock drills with 2138 participants (1395 men and 743 women) were conducted.

⁸As per the relevant indicators established in the Funding Proposal and the Performance Measurement Framework, including relevant updates agreed with GCF, if applicable.

⁹As of 31 December of the relevant calendar year.

¹⁰ Related to the approved indicators and targets in the Logic Framework.

1.2. Number of policies introduced to address GLOF risks or adjusted to incorporate GLOF risks	Only 2 comprehensive disaster management guidelines exist for the KP and GB regions	02	By the end of Year 3, 100% of the national and 90% of district and community authorities in the KP and GB regions are able to prioritize and plan measures to minimize potential losses from GLOFs.	By the end of the project, at least four policies have been adopted by Government to address or incorporate GLOF risk reduction.	This is Year 04 of the project with an extension until January 2024. The project has so far provided support and inputs for drafting of Climate Change Adaptation Action Plans for GB and KP have been drafted These will pave way for devising policy interventions for implementation of Climate Change Policy and Action Plans. The policies to be adopted to address the GLOF risks is linked to the institutional and regulatory systems for climate-responsive planning and development.
2. Community-based EWS and long-term measures are up-scaled to increase communities' adaptive capacity.					
2.1. Number of vulnerable households in KP and GB covered by a GLOF early warning system.	Vulnerable households are not able to receive and react to GLOF early warning messages.	0	By end of year 3 the project, 12 GLOF early warning systems are installed in KP and GB and 40% of households in target communities are able to receive and respond to early warnings and take appropriate actions following the warning (139,268 men, 139,268 women)	By end of year 3 the project, 100% (24 valleys) of households in target communities are able to receive and respond to early warnings and take the appropriate actions following the warning. (696,342 people: 348,171 men, 348,171 women)	The mapping of households and beneficiaries is available with project for target valleys, Once the EWS is installed in 2022, all will benefit from the installed EWS.
2.2. Number of Community based organizations trained in the operation and maintenance of the EWS.	2 GLOF early warning system for KP and GB in place.	1	By the end of Year 3 of the project, at least 09 CBOs are trained in the operation and maintenance of the EWS and ensure its continued functionality	By the end of the project, at least 24 CBOs are trained in the operation and maintenance of the EWS and ensure its continued functionality	1 valley/CBO (Golain in Chitral, KP) already supported through GLOF I project. In all 24 valleys, Community Based Disaster Risk Management Committees (CBDRMCs) have been established to implement and ensure project sustainability after completion. The EWS will be installed in 2022 after which formal training for Operations and

					<i>Maintenance of EWS to these CBDRMCs will be provided.</i>
2.3. No. of physical assets constructed to withstand the effects of GLOF events.	<i>No physical structures in place to withstand the effect of GLOF events.</i>	28	<i>By the end of Year 3 of the project, at least 100 targeted engineering structures have been established to withstand the effects of GLOF events on livelihood assets</i>	<i>By the end of the project, at least 250 targeted engineering structures have been established to withstand the effects of GLOF events on livelihood assets.</i>	<i>In 2021, GIS mapping and HVRA studies for all 24 project valleys have been completed. 28 engineering structures (irrigation Channels) have been completed in 2021 and remaining are planned for construction in 2022.</i>
2.4. No. of small-scale community driven initiatives for GLOF preparedness financed through CBDRM funds	<i>No financial capacity of local communities to prepare for GLOF events</i>	0	<i>By the end of Year 3 of the project, at least 12 small-scale community driven initiatives financed through CBDRM fund</i>	<i>By the end of the project at least 01 community driven initiative in each of the 24 target valleys is financed through CBDRM funds</i>	<i>Revolving Fund activity is on hold as it is an on-granting activity. A Note to File proposing realignment was submitted to GCF in 2021. Formal approval is awaited from GCF.</i>

2.5. REPORT ON CHANGES DURING IMPLEMENTATION (include actual and expected changes)

Overall, the project framework remains as approved by GCF. The following actual and possible change is given below.

Project Extension – The project was granted an extension of 18 months (until January 11, 2024) in Aug 2021. Although the FAA-stipulated project start date was 12 July 2017, the project's actual implementation commenced in July 2018 after receipt of first disbursement from GCF by UNDP (March 2018) and the Inception Workshop (July 2018). Between 2018-2020 implementation was on hold for a period of approximately 9-months, while discussions on implementation arrangements were ongoing between MoCC and UNDP.

Expected Changes in Project Logical Framework - The baseline assessment report, which was submitted to GCF in October 2020 has proposed changes in some of the project indicators, baselines, and targets, based on current context and ground situation. Following numerous discussions and submissions to GCF, a comprehensive response was provided to GCF along with a letter from NDA endorsing the proposed changes. The project is awaiting final approval/further guidance on this from GCF.

Reprogramming of Revolving Fund Activity under Output 2.4- After determining that this activity is an on-granting activity (which is not allowed under UNDP's current accreditation principles), a Note to File was submitted to GCF in Q4 of 2021 – with a proposal to reprogramme this activity under other activities of the project. A formal approval to this effect is awaited from GCF.

2.6 IMPLEMENTATION CHALLENGES AND LESSONS LEARNED

Challenge encountered	Type ¹¹	Measures adopted	Impact on the project implementation ¹²	Lessons learned and Other Remarks
Delays in project implementation due to delay in the release of 2 nd Disbursement in July 2021	Implementation	Rigorous follow-up with GCF to align project requirements and address relevant queries in a timely manner. Regular coordination with the line departments to ensure completion of designs/BoQs of infrastructure schemes by Q 3 so that on-ground implementation takes place during Q4	High	<p>Proper planning and scheduling of field activities is a pre-requisite given the extreme weather conditions and short working season and remote locations of project sites.</p> <p>Maintaining a cordial relationship with the IP and Responsible Parties; close coordination and keeping stakeholders updated on project progress ensures smooth implementation of project activities.</p> <p>Ensuring timely implementation of on-ground activities as planned under the AWP. The Project will strengthen coordination with line departments for progress mapping and monitoring through invoking risk register, gantt charts with fortnightly review by RP and monthly review by IP and PMU. Mapping of activities on centralized dashboard/Project Monitoring Information System with access to IP, RPs and line departments - having access to all construction activities, slope stabilization and installation of EWS at one point for quick review and implementation of mitigation measures.</p>
Delays in project implementation due to extreme weather conditions and COVID-19	Implementation	To continue activities despite COVID-19 variants, vaccination of all stakeholders and communities involved was made mandatory especially before visits/travel to project sites and community mobilization sessions and trainings. For in-person activities, use of masks and provision of hand sanitizers was made compulsory.	High	<p>Proper planning and scheduling of field activities is a pre-requisite given the extreme weather conditions, short working season and remote locations of project sites.</p> <p>Maintaining a cordial relationship with the IP and Responsible Parties; close coordination and keeping stakeholders updated on project progress ensures smooth implementation of project activities.</p>
Delay in Procurement of EWS equipment	Implementation	The procurement process was initiated and expedited to complete it within 2021.	Moderate	Better planning in future would be done by the project for installation of EWS to cover these procurement delays.

¹¹ Implementation; Legal; Financial; Environmental/Social; Political; Procurement; Other; AML/CFT; Sanctions; Prohibited Practices.

¹² Minor/Solved; Moderate; High.

SECTION 4: REPORT PROJECT SPECIFIC ON ENVIRONMENTAL AND SOCIAL SAFEGUARDS & GENDER

4.1 IMPLEMENTATION OF ENVIRONMENTAL AND SOCIAL SAFEGUARDS AND GENDER ELEMENTS

(max 1 page)

Please provide information on the project or programme on the following: (1) key risks and impacts as identified; (ii) compliance with applicable laws and regulations including FAA conditions and covenants; and (3) progress in the implementation of environmental and social management plans and programs including monitoring activities undertaken during the implementation of the funded activity.

(1) The information includes description on any changes in the key environmental and social risks and impacts as identified and arising from the implementation including any unanticipated risks and impacts (*ex. from changes in laws and regulations*) and, based on these if any change in the project's environmental and social risk category. In case of a change in the E&S risk category for the project, please provide an explanation.

During the reporting period, no new social or environmental risks were identified. The overall SES risk category for the project remained Moderate. The ESMF for the project was approved by GCF in 2021 and as part of ESMF implementation, site-specific ESMPs were developed and implemented for 78 activities/interventions, including social safeguard measures, ambient air-quality measures, noise level measures, waste/debris dumping measures, sediment movement control measures and safety of workers (with a focus on Covid-19 prevention).

The project SES Risks are mapped in the table below:

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Risk Description	Impact and Probability (1-5)	Significance (Low, Moderate, High)	Mitigation measures
Risk 1: Sediment movement during rehabilitation of hill slopes	I = 2 P = 2	Low	There is the potential for sediment movement during planting and reforestation. To ensure that the sediment is not mobilized through either wind or more specifically water movement, it will be necessary to prepare an erosion control sediment plan and install silt curtains to restrict sediment movement. The plan shall contain aspects including but not limited to the installation of sediment curtains to reduce sediment movement and the covering of sediment where practicable.
Risk 2: Sediment movement during construction of hard infrastructure	I = 3 P = 3	Moderate	There is the likelihood for sediment movement during the construction of hard infrastructure. To ensure that the sediment is not mobilized through either wind or more specifically water movement, it will be necessary to prepare an erosion control sediment plan and install silt curtains to restrict sediment movement. The plan shall contain aspects including but not limited to the installation of sediment curtains to reduce sediment movement and the covering of sediment where practicable. Further, activities should be undertaken during periods when GLOFs are unlikely to occur to mitigate sediment movement.

Risk 3: Sediment movement during installation of Early Warning System	I = 1 P = 3	Low	When undertaking the installation of weather stations, erosion and sediment control will be established to ensure runoff does not flow into riverine systems.
Risk 4 Locating infrastructure that is socially detrimental	I = 2 P = 2	Low	Stakeholder consultation will be undertaken prior to the selection of infrastructure sites to ensure no impacts.

(2) The information should include status of compliance with applicable laws and regulations of the country as well as the relevant conditions or covenants under the FAA. This can be captured in the table below:

Status of compliance with applicable laws and regulations and the conditions and covenants under FAA

Applicable laws and regulations/conditions and covenants	Status of compliance
<p>FAA Clause 9.02</p> <p>In addition to Clause 18.02 of the AMA, the Accredited Entity covenants that as from the Effective Date of this Agreement it shall:</p> <p>(d) Produce periodical documentation on lessons learned on multiple aspects of the implementation (social, environmental, technical, science, etc.), so that programme replication is carried out adequately</p> <p>(h) Undertake and/or put in place any adequate measures in order to ensure that the management of the environmental and social risks and impacts arising from the Funded Activity complies at all times with the recommendations, requirements and procedures set forth in the Environmental and Social Management Plan, and comply with the Accredited Entity's Social and Environmental Screening</p> <p>(i) Obtain, or ensure that the Executing Entity shall obtain all land and rights in respect of land that are required to carry out the Funded Activity and shall promptly furnish to the GCF, upon its request, evidence that such land and rights in respect of the land are available for the purposes of the Funded Activity; and</p>	<p>FAA Clause 9.02</p> <p>(d) Periodical documentation on lessons learned will continue to be produced during the implementation of the project. In 2021, the project produced monthly progress reports to the Executing Entity and included documentation of lessons learned, challenges and good practices.</p> <p>(h) Adequate measures, as per ESMP are in place. Site specific plans have been developed and implemented by implementing partners through contractors. Provisions made in plans for control over spread of Covid-19. Training on implementation and monitoring of management plans provided to project staff and implementing partners. Regular monitoring conducted for collecting site specific information for assessment of compliance to ESMP measures.</p> <p>(i) The land in which the project activities are carried out is mainly government owned. With regards to communal land which is used for project interventions, FPIC procedures are followed and letters of consent are collected and maintained by the project. The major construction works are in already established water channels owned by provincial government, while the small-scale infrastructures are built within natural water streams, for which river-beds and stream channels are owned by the government of Pakistan. In exceptional cases where private land is utilized for project purpose, land acquisition is done by the government of Pakistan under applicable land acquisition rules and guidelines.</p>
Pakistan Environmental Protection Act 1997(PEPA 97):	PEPA 97 will be applied to all activities. An ESMP for the project has been developed following the

	procedures set forth in Environmental Regulations of Pakistan coupled with the guidelines set forth by UNDP SES. The regulatory requirements for Environmental Impact Assessments, Land Acquisition, Forest Act 1927 and Provincial Wildlife and Biodiversity Acts were duly considered while finalizing the ESMP. During 2021, physical works were carried out. Site specific environmental management plans were developed and implemented in accordance with ESMP provisions thereby ensuring the implementation of Pakistan's Environmental Regulations.
Land Acquisition Act 1894	This Act is applicable to all activities pertaining to land acquisition for infrastructure such as construction of safe havens and flood protection structures, irrigation channels, etc. Most land utilized for project interventions are government owned. However, if there is a requirement for communal or private land, this act is applied by the project for land acquisition.
Forest Act 1927	This Act is applicable in case project interventions involve clearing of forest land through removal of vegetation/trees specified under this act. In such cases, the project ensures that mitigation measures are adopted accordingly once activities are implemented.
Khyber Pakhtunkhwa Wildlife and Biodiversity (Protection, Preservation, Conservation and Management) Act, 2015	In case some of the identified sites fall within designated protected areas, this act will apply and complied with accordingly with adoption of proper mitigation measures. The exact locations of project interventions will be identified in 2021.

(3) Provide a report on the progress made in implementing environmental and social management plans (ESMPs) and frameworks (ESMFs) describing achievements, and specifying details outlined in the tables below.

Implementation of management plans and programmes

(i) activities implemented during the reporting period, including monitoring	(ii) outputs during the reporting period	(iii) key environmental, social and gender issues, risks and impacts addressed during implementation	(iv) any pending key environmental, social and gender issues needing accredited entity's actions and GCF attention
Site-specific Environmental and Social Management Plans for 78 subprojects (20 in GB and 58 in KP) on rehabilitation of damaged irrigation channels (developed in 2020) implemented in 2021.	Site-Specific ESMPs for 78 subprojects	No issues were raised and compliance of ESMP through site-specific ESMP check list was ensured	Not Applicable
Environmental monitoring carried out for 7 completed subprojects	Monitoring reports and site-specific ESMPs and Checklists	No issues were raised and compliance of ESMP through site-specific ESMP check list was ensured	Not Applicable
Sediment movement control measures during construction	Sediment movement plans	No issues were raised and compliance of ESMP through site-specific ESMP check list was ensured	Not Applicable

Safety or workers (with a focus on Covid-19 prevention)	PPE Kits and compliance with COVID-19 protocols	No issues were raised and compliance of ESMP through site-specific ESMP check list was ensured	Not Applicable
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Additionally, include a description of the actions undertaken towards increasing the relevant stakeholders' engagement in the project environmental, social and gender elements, and a list on the grievances received in the reporting period that will include at least the description of the grievance, the date the grievance was received, and the resolution of the grievance.

Information below in this sub-section should be provided for all projects regardless of the E&S risk category for the project

Implementation of the stakeholder engagement plan

<i>(i) activities implemented during the reporting period</i>	<i>(ii) dates and venues of engagement activities</i>	<i>(iii) information shared with stakeholders</i>	<i>(iv) outputs including issues addressed during the reporting period</i>
Set of 4 trainings for government stakeholders and communities of target valleys (KP and GB) on Disaster Risk Management	15 th February- 11 th March 2021 Hill view Hotel, Islamabad	Strategies and skills with regards to disaster roles, responsibilities and preparedness for effective response, recovery, and reporting	<ul style="list-style-type: none"> i. Involvement of local governments and communities in DRM procedures. ii. Capacity building to prepare and respond to disasters, specifically planning and implementation of climate change adaptation and coping strategies with particular focus on GLOF risk reduction in collaboration with at risk communities. iii. This activity contributed towards laying the groundwork to enhance the expected sustainable development potential of the project.
Journalist Training for 24 journalists from KP, GB and Islamabad, on Ethical Reporting on Climate Change	21 st to 24 th November 2021, Darbar Hotel, Hunza, GB	<ul style="list-style-type: none"> i. Science of climate change and GLOF's, related policies and frameworks ii. Ethical reporting on challenges faced by vulnerable community members (especially women) in combating the effects of Climate change and GLOF events, practices, and success stories of the region iii. Site visit to project target valley and meeting with CBDRMC. Debrief on field visit about threats of Climate change and GLOF events to community members and project interventions. 	<ul style="list-style-type: none"> The training helped practicing journalists and reporters to update their knowledge on Issues related to climate change in GB, KP and Islamabad, as well as strategize how best to convey scientific data on the subject as well as identify and counter argue misinformation that circulates on social media and elsewhere regarding disaster risk management. iv.

Implementation of the grievance redress mechanism

(i) description of issues/complaints received during the reporting period	(ii) status of addressing issues/complaints
Grievance Redress Mechanism (GRM) available with the project and is already in implementation in all project valleys.	Project conducted follow ups with communities and district administrations to collect any grievances on record and no issues/complaints formally received during the reporting period.

4.2 GENDER ACTION PLAN

The reporting should be done for activities, targets and indicators already set in the action plan including on vulnerable groups (youth, poor, female heads of households, etc.) as would have been identified in the gender analysis and action plan. If activities or targets are not achieved as per plan, reasons should be provided, and recourse action should be proposed. Please include a reporting on any changes or deviations.

Include a Report on implementation challenges and lessons learnt and how these will inform on-going actions and what action will be taken by when to address the challenges faced.

Incorporate both quantitative data and qualitative report of the performance of such actions, and on progress on actions identified.

During the reporting period, women's participation in key activities of the project was ensured despite challenges faced in project locations. The Gender Strategy and Action Plan was revised in 2020 and activities in 2021 were implemented in line with the updated GAP. The revisions to the gender strategy and action plan focus on capturing the local context; the issues around gendered division of labour and time use; power and decision making and knowledge and capacities of the intended beneficiaries under GLOF-II. It ensures that marginalized men and women are included as beneficiaries of the Project; women remain not only beneficiaries but are active agents of change rather than as passive recipients; barriers are reduced to have meaningful participation of women in all interventions; recognizing and harnessing the full potential of women to allow them to play their role in community level decision making. It also provides a framework to incorporate gender perspective into the project in a systemic way at the organization, implementing partner and field level. This strategy developed is integrated with the Gender Action Plan with detailed activities and interventions for implementation of the strategy at the organization, Implementing level and field level.

Even though no additional technical resource were available for the implementation of GAP, the project ensured gender inclusion in activities despite cultural constraints in the target locations. An estimated 1,849 females participated in various activities of the project against a total number of 5,975 participants. Focus on gender parity was ensured in activities carried out at the community level such as community mobilization sessions, awareness raising sessions, mock drills, and trainings of CBDRMCs. A total of 07 sessions were exclusively carried out on Gender Development in GB with 57 % participation of women (89 women, 67 men). 05 Gender awareness sessions with 95% female participation were undertaken in KP (155 women, 09 men).

For outreach and awareness, women's participation was ensured by securing female speakers for the panel discussions and TEDx salon events. Furthermore, women journalists were invited to the journalists training, despite limited number of female journalists in mainstream media at the provincial level. Women's participation was also ensured at the trainings imparted to government officials and community members on DRM.

The scaled interventions proposed under the project in eighteen districts are not only reducing vulnerability of communities' land and water resources by implementing climate-resilient agricultural practices that contribute to food security but are also considering women's needs to promote gender equality, benefiting over 348,171 women. The aim remains to target at least 30% women in all areas under the project implementation activities out of which an overall 31% involvement was achieved in activities

In reference to the key findings of the gender study conducted in 2020 and consistent with findings from secondary data, the on-ground status of gender inclusion and participation was improved in target valleys, whereas in few valleys, the project faced issues in engaging women due to cultural norms. Women play a major role in agriculture (planting, growing, harvesting, sorting/separating), vegetable cultivation, livestock rearing and management, water and fuel wood collection, cooking, childcare, and a host of other productive and reproductive tasks. According to the study, women also feel vulnerable to climate change induced risks and feel that they are not prepared to react and respond to such emergencies. Consultations revealed the specific risks that women face and the types of livelihood activities they would like to pursue to enhance their socio-economic well-being. Almost all women and men expressed their desire to have trainings, gender sensitisation and capacity building sessions, even willing to sit

together for meetings and training events in certain areas of GB whereas in other more conservative areas (e.g., Diamer region) this is still not possible. In lieu of this, GLOF-II project's partnership with the Gilgit Baltistan Rural Support Program (GBRSP) in GB and Civil Defence Directorate in KP offered an effective and inclusive approach for the project to extend outreach to community men and women in a participatory and gender-sensitive manner. These organisations are engaged for social mobilization, trainings, and sensitization sessions. At a basic level, it is concluded that GLOF-II includes multiple cross-sectoral interventions to be implemented through various outreach mechanism for men and women through a combination of approaches which can promote inclusion and lead to greater women's empowerment. There are instances, i.e installation and construction activities where opportunities for women's participation is limited but it is proposed that the Project continue to explore and implement affirmative actions and innovations for women focused initiatives that will enable greater participation and benefits.

At the project management level, there is an explicit intent to ensure gender balanced recruitment through engaging both men and women in the project team. As of December 2021, there are 05 female staff as part of the PMU out of 10 staff. At the field level, there are plans to engage an increasing number of women as facilitators, community mobilisers, resource persons, local group leaders, change agents for dissemination of key messages and committee members. Women are being encouraged to participate in DRM committees and village hazard watch groups and trainings provided on climate change, GLOF events, DRR and slope stabilization programme etc. Gender considerations have been mainstreamed into all training and knowledge sharing activities. There will be on-going assessment to determine when and where women can be engaged to take on leadership and mentoring roles. At a minimum, all community level events/training sessions target women as active participants while adhering to local cultural norms and sensitivities. Women's participation in all outreach and awareness raising activities is being ensured for effective gender mainstreaming. The M&E system includes not just progress monitoring (inputs, activities, and outputs) but also gender-disaggregated results at the outcome and impact levels.

The early warning system and communication/dissemination program will apply gender-responsive considerations in the dissemination of disaster warnings and post-GLOF support. Local government entities in charge of managing post-GLOF support will be trained so that financial support can flow to activities that meet the needs of women. Likewise, operations and maintenance of EWS are designed to be handed over to local governments in collaboration with communities. Women's voices will inform the management at the local level of EWS set up and the maintenance committees will provide an additional avenue for women to assume leadership roles.

Overall, the project continues to promote a shared understanding of the results chain for developing and tracking indicators of delivery of the gender action plan, and the importance of making progress on gender equality which can in turn strengthen its overall climate and resilience outcomes.

4.2.1 PROGRESS ON IMPLEMENTING THE PROJECT-LEVEL GENDER ACTION PLAN SUBMITTED WITH THE FUNDING PROPOSAL.

Activities/actions	Indicators	Baseline	Targets, including sex-disaggregated targets	Timeline	Responsibilities	Budget	Report on annual progress
Review of gender specific needs and requirements	<ul style="list-style-type: none"> Gender based TNA and organizational capacity assessment conducted 	0	Project level TNA and CA report produced	By end 1 st Q 2021	UNDP CO GLOF-II P&DD <i>All partners</i>	N/A	Since the AWP 2021 did not have the provision of a Gender Expert/Specialist, no gender capacity assessment was undertaken

Enhanced institutional capacity for gender-based planning and development	<ul style="list-style-type: none"> Appointment of gender focal person(s) Review and revision of ToRs of CCC, TWGs Formulation of gender specific standards and guidelines Inclusion of women in project committees Stakeholder inception workshops and provincial and district coordination workshops to include dedicated session on gender equality 	0	Appointment of at least 1 gender focal person at project and partner level Revised ToRs developed and approved for CCC and TWGs Gender sensitive policies and guidelines in place	By end 1 st Q 2021	UNDP CO GLOF-II P&DD <i>All partners</i>	N/A	Gender Focal Person (GFP) will be appointed in 2022. At provincial level, relevant line departments, GBRSP and GBDMA have gender focal points that were involved in training, capacity building and social mobilization activities for women. For KP, 01 consultant was hired to undertake community sensitization sessions. Gender sensitive policies and guidelines would be put in place once GFP is onboard.
Review of gender-responsive policies	<ul style="list-style-type: none"> Review drafts of existing or new CCA/GLOF policies to identify gender gaps and issues 	1 CC strategy and 1 policy document in place for GB and KP	Review carried out for existing strategy and policy documents Gender gaps identified and documented	On-going basis As needed	EPA Forest UNDP CO GLOF-II P&DD Legal expert Gender experts	N/A	Since the AWP 2021 did not have the provision of a Gender Expert/Specialist, the strategy and policy could not be put in place. Review of respective documents will be carried out, gaps identified, Strategy and Policy document put in place once the expert is onboard in 2022.
Ensure inclusiveness within contributions allocated for gender-specific plans	<ul style="list-style-type: none"> No. of separate and mixed consultations held with men and women to agree on and prioritize issues Women constitute 50% of those formulating any plans and strategies No. of formal and informal linkages built with gender resource experts, CSOs, external partners and organizations for providing gender focus for plans/policies No. of alliances built with known pro-women legislators/policy makers, local elected officials 	0	Qualified and relevant gender experts are engaged formally or informally to contribute towards gender-integrated plans	On-going basis	EPA Forest UNDP CO GLOF-II P&DD Legal expert Gender experts CSOs Academia //think-tanks	N/A	Gender expert could not be taken onboard however inclusion of women was ensured in the establishment of CBDRM committees. However, IPs in GB (GBRSP and GBDMA) and KP (Social Welfare Department and Rescue 1122) have gender focal points that were taken onboard to undertake respective trainings, social mobilization sessions and capacity building for women.
Awareness campaign/targeted lobbying and advocacy	<ul style="list-style-type: none"> No. of targeted campaigns and advocacy carried out for addressing gaps in GLOF policies/strategies 	0	Awareness raising and lobbying carried out at national and sub-national levels	On-going basis	EPA Forest GLOF-II P&DD Legal expert Gender experts	N/A	07 sessions were exclusively carried out on Gender Development in GB with 57 % participation. (89 women, 67 men). 05 Gender awareness sessions with 95% female participation were undertaken in KP (155 women, 09 men).

Installation of EWS	<ul style="list-style-type: none"> No. of women given complete orientation on EWS installed at community level 	0	100% women involved in orientations	After Installation of EWS	GLOF-II P&DD DMAs Gender experts	N/A	EWS were procured in 2021, hence activity will be undertaken once installation is done.
Orientation and training of PMD and DDMA's	<ul style="list-style-type: none"> No. of gender sensitive training conducted for PMD and PDMA/DDMA's staff 	0	All relevant staff trained	After Installation of EWS	GLOF-II P&DD DMAs Gender experts	N/A	EWS were procured in 2021, hence activity will be undertaken once installation is done.
Ensuring equal and significant inclusion of women's feedback on EWS	No. of community women groups/leaders provided information on functioning and processes of EWS	0	All community women oriented on EWS	After Installation of EWS	GLOF-II P&DD DMAs Gender experts	N/A	EWS were procured in 2021, hence activity will be undertaken once installation is done.
Ensure women participation in community mobilisation	<ul style="list-style-type: none"> No. of community level focus groups and discussions with women for identification of needs and constraints At least 50% of office-bearers/leadership to be women No. of men and women in general body 	0	100% women involved in community level consultations At least 50% women consulted/involved in decision making and written resolution obtained from women	On-going basis	All partners PMD GBRSP	N/A	26% female participation was ensured in social mobilization and women awareness and sensitization sessions. (571 women, 1598 men). 18.6% women constitute the general body for all registered CBDRMCs (111 women, 583 men)
Training of CBOs	<ul style="list-style-type: none"> No. of trained and sensitized members of CBOs/CBDRMCs No. of specialized training sessions on women identified needs e.g. planning, budgeting, DRR, H&H etc No. of visits, meetings or exchanges of community women with CSOs, local leaders and government officials 	0	100% women members of CBOs/CBDRMCs trained and sensitized on project and given gender sensitisation training	On-going basis	GLOF-II PMD GBRSP	N/A	45% participants were part of the various training activities including DRM, CBDRMC trainings and mock drills. (1215 women out of 3413 participants) 10% participants were part of the various Coordination meetings. (06 women, 53 men)
O&M of early warning systems	<ul style="list-style-type: none"> No. of men and women trained in O&M committees No. of women members included in O&M committees 	0	100% women involved in community level consultations At least 50% women consulted/involved in decision making and written resolution obtained from women	After Installation of EWS	All partners PMD GBRSP	N/A	EWS were procured in 2021. Hence activity will be undertaken once installation is done.

Small-scale infrastructure	<ul style="list-style-type: none"> No. of separate meetings/consultations with women for scheme planning and implementation (site selection, social survey, O&M) No. of women given orientation on scope and benefits No. of women involved in O&M 	0	<p>100% Women <i>consulted</i> on site and scheme selection</p> <p>At least 30% women trained on O&M aspects</p>	On-going	PDMA's DDMA's GBRSP	N/A	Women were consulted and were involved before the construction commence for site selection, community dialogues, change and adaptation during construction phase etc.
Slope-stabilisation through bioengineering	No. of women given opportunity to be involved in plantation activities	0	30% of total labour for plantation TBD	On-going	Forest Department	N/A	During 2021, waged labour was involved for plantation activities, where plantation activities by RPs were carried out (162 females for GB). In KP no women could be engaged due to cultural barriers.
Irrigation systems (construction, repair, rehabilitation)	<ul style="list-style-type: none"> No. of women consulted to determine priorities and issues for small-scale infrastructure No. of women included as members in water user associations (WUA) No. of line department staff to be provided gender sensitization training (OFWM) Rapid assessments to include time-cost savings incurred for women for planned schemes No. of women provided the opportunity to provide equitable waged labour NO. of women included in any on-farm training in new techniques No. of implementation plans discussed with men and women groups and time-table of activities agreed in consultation with women 	0	<p>100% Women <i>consulted</i> on site and scheme selection</p> <p>At least 1 woman representative per household to be included in WUAs</p> <p>No. of women involved in improved water management practices</p> <p>No. of women providing skilled/unskilled labour</p>	On-going	GLOF P&DD OFWM staff Gender focal person	N/A	Women were consulted and were involved before the construction commence for site selection, community dialogues, change and adaptation during construction phase etc.
Women entrepreneurial training	<ul style="list-style-type: none"> No. of local women oriented and trained for basic repair and maintenance No. of women focal persons facilitated in market access/links for training and O&M No. of referral services / linkages facilitated 	0	<p>At least 1 woman per valley trained in basic O&M</p> <p>X women focal persons linked with external resource persons for training</p>	After Installation of EWS	GBRSP P&DD Private sector	N/A	EWS were procured in 2021. hence activity will be undertaken once installation is done

	for women entrepreneurs						
Hazard watch groups	<ul style="list-style-type: none"> No. of male and female community members form HWGs and sensitized No. of women involved in the hazard watch groups and other women involved in monitoring of HWGs 	0	At least 1 woman member in HWGs established	Ongoing	GLOF-II GBRSP DDMAs	N/A	In GB women constitute 28% of the HWGs (373 Women, 965 Men). Hazard watch groups have been established in 21 valleys with women participation in all. HWGs in 03 (Reshun, Mankiyal, Kandiya) remaining valleys of KP will be formed and registered in 2022. However, 2.8% women volunteers are active in KP (KP 28 women, 951 men).
Community centres/safe havens/halls	No. of community centres/safe havens that cater to female- specific needs e.g. accessible location, separate women washrooms, availability of health and hygiene products, separate spaces	0	Community centre is built with women involvement in site selection and design of gender-friendly features	Once CBDRMC centres are constructed	GLOF-II DDMAs	N/A	Construction of CBDRM centers could not be done in 2021, construction work will start from March 2022 owing to severe winter season, hence gender specifics will be ensured once the activity starts.
Community-level initiatives through CBDRM funds prioritising gender equality	<ul style="list-style-type: none"> No. of fund amounts given with a focus on services/products that lead to practical and strategic gender benefits No. of low-cost, feasible solutions applied for solving problems faced by women in DRR/DRM No. of products/technologies tailored on the basis of identified women needs and priorities implemented 	0	<p>CBDRM funds provided to ensure women beneficiaries</p> <p>Women focused products introduced</p>	By end 2021, and through 2022	GLOF-II GBRSP CBDRMCs	N/A	The revolving fund activity is proposed to be reprogrammed, decision on which is awaited from GCF. Once the decision is received, the project will plan for gender inclusion accordingly.
Women-focused micro-finance access	No. of women accessing micro-finance, insurance and other MF products	0	At least 50% CBDRM funds allocated for women	By end 2021, and through 2022	GLOF-II CBDRMCs Local MF service providers GBRSP	N/A	The revolving fund activity is proposed to be reprogrammed, decision on which is awaited from GCF. Once the decision is received, the project will plan for gender inclusion accordingly.
Deepen gender based KM, research and development products	<ul style="list-style-type: none"> No. of women focused partnerships/links with technical experts, scientists or academic institutes in gender No. and types of tangible interactions with gender experts, CSOs, partners, academic institutes for replication of successful gender approaches and results under GLOF-II 	0	<p>Links formed with gender experts (universities, CSOs)</p> <p>2 KM products developed</p> <p>1 study conducted on GLOF risk reduction</p>	By end 2020, mid-way 2021 and during implementation	Gender focal person Communication specialist M&E specialists	N/A	Since the AWP 2021 did not have the provision of a Gender Expert/Specialist, hence the activity will be done once the expert is onboard in 2022.

	<ul style="list-style-type: none"> No. of KM and other gender-focused IEC/sensitization products developed No. of studies conducted for identifying new approaches/opportunities for women focused GLOF risk reduction initiatives 						
Identify and document women-focused best practices, experiences and lessons	<ul style="list-style-type: none"> No. of best practices and lessons learned identified on the basis of contribution to gender equality and/or empowerment as well as negative lessons, if any No. of women-focused case-studies prepared for showcasing gender achievements No. of papers/technical briefs prepared for replication and up-scaling successful cases No. of gender-disaggregated lessons and results documented in GLOF-II 	0	3 case studies/ lessons learned	on-going and as per targets in AWP	GLOF-II Gender expert M&E team Communications team	N/A	Since the AWP 2021 did not have the provision of a Gender Expert/Specialist, hence the activity will be done once the expert is onboard in 2022.
Dissemination of gender-focused information to key stakeholders for awareness raising and action	<ul style="list-style-type: none"> No. of gender focal persons at partner level sensitized and equipped to promote awareness No. of women and men identified and trained as focal persons in promoting behavior change and provision of key gender messages in communities No. of awareness raising campaigns including key gender messages (<i>at all levels</i>) 	0	<p>At least 2 focal persons per province/region</p> <p>Community level women activists engaged (1 per valley)</p> <p>1 focused awareness campaign</p>	On-going	GLOF-II Gender expert M&E team Communications team	N/A	Since the AWP 2021 did not have the provision of a Gender Expert/Specialist, hence the activity will be done once the expert is onboard in 2022.
Gender sensitive communication products developed and disseminated	<ul style="list-style-type: none"> Prepared website, brochures and press releases for key stakeholders, national and subnational policy makers and duty bearers Communication strategy with gender sensitive guidelines developed Website with separate links and resources on GLOF-II related data and resources for men and women Gender sensitive GRM in place 	0	<p>Links formed with gender experts (universities, CSOs)</p> <p>2 KM products developed</p> <p>1 study conducted on GLOF risk reduction</p>	<p>On-going</p> <p>By end 2020</p>	GLOF-II Gender expert M&E team Communications team	N/A	<p>5 flyers on gender concepts, importance and planning have been developed.</p> <p>01 poster has been designed specifically for gender inclusion in trainings.</p> <p>Project reached out to provincial departments for gender inclusion in nomination for journalist trainings, hence 02 females attended the training out of a total of 24 participants.</p> <p>31% women were reached through</p>

	<ul style="list-style-type: none"> • Accessibility of gender awareness based workshops and seminars of rural populations 						Community Sensitization through Media Awareness (1849 women;4126 men).
Appoint gender expert	<ul style="list-style-type: none"> • Appoint gender specialist (at-least half time) for planning, coordinating and organising all gender related activities, particularly the following: <ul style="list-style-type: none"> ✓ Review existing structure, policies and procedures at project level and identify gaps ✓ Ensure safe and conducive working conditions for female employees ✓ Design and implement gender sensitive tools and material for incorporation across project cycle ✓ Update and monitor implementation of GAP ✓ Carry out organizational assessment of gender capacities 	0	0	Within first quarter and later on intermittent basis	GLOF-II	N/A	Since the AWP 2021 did not have the provision of a Gender Expert/Specialist, he/she will be taken onboard in 2022.
Recruitment	<ul style="list-style-type: none"> • Review staffing and ensure parity within the work force to enable gender balance • Gender sensitive human resource policies for all project-based recruitment (e.g. qualified women staff at senior, mid and low levels are short-listed, interviewed and selected) 		0	By last quarter of 2020 and as needed	GLOF-II	N/A	25% staff at PMU, PIU-KP and PIU GB are females (14 women;42 men). 50 % females were hired under the internship program at the federal level and 16% at provincial level for youth inclusion (15 women;15 men at federal level and 11 women;59 men in provinces). 13% female consultants have been taken on board for various studies (04 women; 26 men).
Gender specific training and capacity development	<p>Organise and implement the following:</p> <ul style="list-style-type: none"> • Review capacities of management and staff in planning and implementing gender inclusive projects • Design and make available appropriate gender sensitive training material • Basic training for all staff and core partners on gender sensitization/awareness raising 		Work in progress on: Gender TNA Gender material development Module development	Basic training implemented within 1 st quarter of 2021 followed by training on a need basis	GLOF-II Consultant Gender focal person	N/A	Review capacities of management and staff in planning and implementing gender inclusive projects was done when the gender strategy and action plan was revised in 2020. 01 training manual has been made. More tools and products will be developed once Gender expert is onboard in 2022.

	<ul style="list-style-type: none"> Specific training on gender sensitive monitoring and evaluation organized for relevant staff 						
Ensure gender sensitive monitoring, reporting and evaluation	<ul style="list-style-type: none"> Gender disaggregated database: gender disaggregated data is being collected in baselines, surveys and other activities and used for design of new activities Gender disaggregated data is monitored and reported throughout the project cycle with respect to women participation, access, benefits For any local level monitoring of (perception surveys, feedback mechanisms) ensure that at least 50% involved and participating are women Allocate human and financial resources for inclusion of gender issues in M&E activities 		0	At inception and throughout project implementation	Provincial coordinators/M&E specialists P&DD focal person(s)	N/A	Gender disaggregated database has been made for 2021 for DRM Trainings, Women Awareness & Sensitization, Social Mobilization, CBDRMC trainings, Mock Drills, Miscellaneous coordination meetings, and Community Sensitization through Media Awareness



4.3 PLANNED ACTIVITIES ON ENVIRONMENTAL AND SOCIAL SAFEGUARDS

In 2022, the project will continue with its key implementation activities (including physical activities vis' a vis' construction of infrastructure and installations of EWS equipment) in target communities of KP and GB, for which the updated ESMP will be used and the site-specific ESMPs will be conducted. Refer to the section 4.1 above, project will comply to SESP and site specific ESMPs mitigation measures for construction activities of small-scale infrastructure, installation of water efficient irrigation systems in GLOF prone areas and installation of EWS, which require erosion, drainage and sediment control measures, flora and fauna management measures, locating infrastructure that is socially detrimental. All activities conducted with appropriate mitigation measures for workers health and safety in context of COVID-19 and ensured uptake of adequate SOPs and guidelines. The activities of the project in 2022 will also ensure compliance with archaeological, indigenous, and cultural heritage management requirements of the ESMP.

In view of above and to ensure implementation of ESMP, following activities have been planned for 2022:

- a) Re-hiring of Social Safeguard Expert and ESMP Specialist
- b) Develop and implement a training plan for communities on Grievance Redress mechanism
- c) Implement a training plan for implementing partners on environmental and social issues for effective implementation of environmental and social safeguards
- d) Development of additional site-specific ESMPs for sub projects in accordance with ESMP implementation mechanism
- e) Conduct regular monitoring of environmental and social safeguards under sub projects as per ESMP requirement
- f) Hold regular stakeholder meetings to review progress on ESMP implementation
- g) Monitor and maintain the Grievance Redress mechanism and manage grievances through established procedures. Address/report complaints, as needed, for consideration of appropriate authorities.
- h) Review and update project risk log on monthly basis
- i) Compliance with Risk Log mitigation measures and site specific ESMPs
- j) Mapping of activities in centralised dashboard/Project Monitoring Information System with access to IP, RPs and line departments

4.4 PLANNED ACTIVITIES ON GENDER ELEMENTS

Identified under GAP Strategic Framework, the following actions would be carried out by the project for gender integration in 2022:

- a) Hiring of Gender Expert
- b) Gender orientation workshops conducted for staff and partners
- c) Gender elements embedded in institutional structures and committees
- d) Ensuring gender mainstreaming in policy and planning interventions of the project
- e) Review, develop and adapt mechanisms and EWS systems to reduce bias and stereotyping and make it more gender-inclusive
- f) Engage Women more proactively in community consultations and planning for structures and mechanism for GLOF response through participation in all trainings on project interventions, capacity building, outreach activities etc.
- g) Sensitisation of officials and communities on need for gender integration in DRR/CCA and GLOF risk reduction conducted
- h) Gender focused knowledge management products developed and disseminated
- i) Gender-focused communication strategy and guidelines developed
- j) Communities sensitized on gender issues and GRM and how to access and use the GRM
- k) Collection and reporting on gender disaggregated data and mapping in centralised dashboard/Project Monitoring Information System with access to IP, RPs and line departments

The updated gender strategy and action plan was completed in November 2020. The project will continue to monitor the implementation of the action plan in 2022 and hiring a gender expert to design specific interventions under the approved Gender Action Plan and report challenges and lessons learnt, as well collecting, and collating quantitative data on progress on actions designed.

With international best practice standards and those espoused by UNDP, the Project will promote a shared understanding of the results chain as the main conceptual foundation for developing and tracking indicators of delivery and change. The usefulness of an effective gender-based M&E system will not only include implementation monitoring (inputs, activities, and outputs) but also results at the outcome and impact levels, disaggregated by gender.

The monitoring schedule concerning gender activities for the next reporting period will be quarterly at the end of each quarter under the Monitoring and Evaluation aspect of the project. The impact potential will also be addressed in the update reports to be shared quarterly with the implementing partner. The project will focus on both qualitative as well as quantitative reporting.

SECTION 5: ANNEXES

Annex 1. [Updated implementation timetable for the Funded Activity.](#)

Annex 2. Accredited Entity compliance reports (self-assessment reports¹³, report on actions pursuant to Clause 18.02, if applicable¹⁴).

SECTION 6: ATTACHMENTS

Attachment 1. Unaudited/Audited financial statements (as required by FAA).

(If available. If not submitted, indicate date of submission.)

Other Attachments (if any). Such as additional budget-related information, loan repayment schedules to GCF (interest/principal), equity investment schedules, other related reports relevant to the Funded Activity, statements of capital account, valuation reports, credit guarantee agreements, investor reports, and others, as specified in the relevant legal agreements (e.g. Funded Activity Agreement, Shareholders Agreement)

ADDITIONAL SECTION: COVID-19 IMPACT

Please indicate if your project/programme is adversely impacted by the COVID-19 pandemic.

Yes

Please choose the severity of overall impact (Description of levels of severity):

2. Facing delays: Implementation progress faced delays in the timeline and resulted in changes in implementation plan.

Please describe an overall impact on your project/programme by the COVID-19 pandemic (100-word limit).

The project faced significant challenges in the wake of COVID-19 pandemic, resulting in imposition of containment measures, including restrictions on inter and intra provincial movements and stakeholder engagement. Several project activities were delayed - including construction and civil work, trainings, mock-drills, coordination meetings.

Please describe details of challenges encountered and corrective/mitigation measures taken.

Type of Challenges Encountered	Details of the challenges encountered
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¹³ In accordance with the Monitoring and Accountability Framework, a self-assessment of its compliance, in accordance with Clause 13.01 of the Accreditation Master Agreement, with the Fiduciary Principles and Standards, ESS and Gender Policy.

¹⁴ Only applicable to International Accredited Entities. In accordance with the Monitoring and Accountability Framework, a report on its actions carried out or planned to be carried out pursuant to Clause 18.02 of the Accreditation Master Agreement.

Field Activities	<p><i>This could include activities halted due to restrictions on movement and assembly of people e.g. baseline studies, construction work, workshops, training, planting activities, limitations in ability to supervise activities, etc.</i></p> <p><u><i>Support to Academia</i></u> The project had planned to provide support for research-based activities on climate change induced disaster (particularly GLOFs) at national and provincial levels in universities. This activity could not take place due to Covid-19 restrictions and intermittent closure of schools/Universities during 2021. Hence, this activity has been carried forward to 2022.</p> <p><u><i>Community Engagement</i></u> Community training schedules were impacted due to occasional lockdowns by the Government of Pakistan in lieu of the onset of different variants of the disease over the course of 2021, however, the project was still able to achieve the targets adhering to all protocols and COVID-19 SOPs.</p> <p><u><i>Exposure Visits</i></u> The set target for community and stakeholder exposure visits to GLOF implementation sites was also impacted because of the lockdowns and restrictions. As a result, limited number of visits were planned after careful examination of the situations and following COVID-19 SOPs.</p> <p><u><i>International Study Tours</i></u> The activity for international study tours for communities, technical specialists, and decision makers could not take place in 2021 due to COVID-19 travel restrictions and extensive quarantine requirements. Therefore, it is planned for 2022 depending on COVID situation.</p>
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Please describe if any support is required from the GCF to address the COVID-19 impact on your project/programme.

Currently the project is adhering to COVID-19 SOPs and carrying out all planned activities accordingly. No support is expected from GCF at this point in time.

