





PROGRESS REPORT GLOF II PROJECT



GLOF II PROJECT 1 JULY- 31 AUGUST 2019

PROGRESS REPORT 1st JULY 2019 – 31st AUGUST 2019

SCALING UP OF GLACIAL LAKE OUTBURST FLOODS RISK REDUCTION IN NORTHERN PAKISTAN (GLOF II)

1. Introduction

The objective of the progress report of GLOF-II project is to inform and seek guidance and support from the Implementing Partner, provincial line departments and other stakeholders including UNDP management regarding achievements, pace of work, action plans, bottlenecks and constraints arising during the implementation process. The report covers the period from 1st July to 31st august 2019 and includes details of all provincial activities as well.

2. Progress Update (PMU lsb, PIU KP, PIU GB)

2.1 Recruitment of project staff:

- Recruitment of the following positions have been completed:
 - 1. Project Coordinator Gilgit Baltistan
 - 2. Monitoring and Evaluation officer PMU Islamabad
 - 3. Field Officer Chitral
 - 4. Filed Officer Skardu
 - 5. Admin & Finance Officer Chitral
 - 6. Admin & Finance Officer Skardu
- Test for the position of AFO conducted; interviews are pending due to non-confirmation of representative from MoCC to participate as observer in the interview panel.
- Shortlisting for the positions of M&E Assistants GB and KP and Procurement Assistant (PMU Islamabad) have been completed and written tests conducted
- Request for advertising 8 positions of drivers and 5 positions of office assistants has been processed to HR for advertisement and recruitment.

2.2 Establishment of project offices:

- PMU Isb office at ISE building has been set up and is operational.
- PMU GB office was inaugurated by the Advisor to PM on Climate Change on 23 August 2019.
- FO office Chitral: Security assessment of PMD building has been conducted, and work on renovation, security measures initiated. Field staff have been placed in the PMD office building.
- FO Skardu: Security assessments of proposed PMD and P&D buildings conducted, and security assessment report has been shared by security unit on 3-9-19. The staff have been temporarily based in the proposed building of P&D.

2.3 Procurement of vehicles:

• Request for issuing prior permission for procurement of project vehicles was initially not accepted by MoFA, however, the matter was taken up through DG Environment, MoCC. Further clarifications and information for reconsidering the case was requested and requisite information was provided on 28 August 2019.

• As an interim arrangement the project management and UNDP operation management have agreed to use existing vehicles on loan basis till the time new vehicles are procured. A total of eight vehicles are being transferred to the project offices; two each to PMU Isb, PIU Gilgit and PIU Peshawar and one each to Field Office Chitral and Skardu.

2.4 Procurement of consultancy services:

- Proposals against the following 7 RFPs and IC notices have been received.:
 - 1. Knowledge, Aptitude and Practices (KAP) studies
 - 2. Stakeholders' needs and capacity assessments
 - 3. Development of GLOF-II project pre-implementation documentary
 - 4. Design and roll-out of the national and sub-national GLOF-II project web-site
 - 5. Development of Gender Strategy and Action Plan
 - 6. Development of Environmental and Social Management Plan
 - 7. National Technical/ Climate Change Expert
- Panels for the evaluation of technical proposals were notified for the above, but evaluations are pending due to non-confirmation of MoCC's representative as panel member. UNDP operation manager has sent a request to MoCC in this regard.
- TORs, IC notices and RFPs for the second batch of consultancy services were re-submitted incorporating all comments, on 20 June 2019, for approval:
 - 1. Safeguards Specialist
 - 2. Conduct bio-engineering feasibility studies (KP)
 - 3. Conduct bio-engineering feasibility studies (GB)
 - 4. Conduct forestry surveys of project sites (forest, rangelands, biodiversity)
- TORs, IC notices and RFPs for the third batch of consultancy services have been submitted on 4-9-19 for approval of NPD on part file (as the original file is with NPD).
 - 1. Study and explore significant glaciers for ecotourism
 - 2. Climate Change Adaptation Action Plans
 - 3. Glaciologist
 - 4. Climatologist/meteorologist
 - 5. Agriculture expert
 - 6. Development of digital Library and Knowledge Repository

2.5 Studies and activities through PMD and provincial line departments;

- LOAs signed with P&D departments of KP and GB. Provincial project accounts have been opened by KP and GB P&Ds and first tranche of funds PKRs. 15,582,699.00 transferred to P&D KP on 27 Aug 2019
- KP P&D and line departments kicked off their provincial activities on 2nd July 2019 in Chitral by initiating the Hazards Vulnerability Risks Assessment with the help of the Centre for Disaster Preparedness and Management, University of Peshawar.
- LOA with PMD is in process and may take longer to be approved. Keeping in view the limited time and urgency of the matter, feasibility assessments have been initiated through PMD's own experts. GIS based assessment and prioritization of the 33 vulnerable valleys has been done and inception report submitted. Prioritzed valleys along with criteria are given in the table belwo. Field teams have been constituted and the feasibility study for installation of EWS systems and ground truthing are in progress.

GIS/RS based assessment of GLOF vulnerable valleys (Criteria)
(Criteria)

- Size of the Lake, (Weight 8%)
- Adjoining Area slopes (Weight 12%)
- · Distance from Glacier (Weight 13%)
- Glacier Situation (Hanging, Crevasses) (Weight 9%)
- · Steepness of the Lake (Weight 11%)
- Location of the Lake, Supra, Side Moraine, End Moraine, Englacial, Erosion (Weight 13%)
- Stability of Lake (Damming Material and width of damming wall at outflow) (Weight 12%)
- Distance to Settlement (Weight 12%)
- Settlement Area Size (Weight 10%)

S. No.	Lake Number	Type of Lake	Elevation	Priority Number	Area and Disctirct	Valley
1	Gil gl 121	Cirque	4430	7	Sengul, Gilgit	~
2	Gil gl 222	Valley	4490	8	Damas, Gilgit	Gahkoch
3	Gil gl 261	End Moraine	4511	27	Raushan, Ghizer	
4	Gil gl 595	End Moraine	4622	20	Dahimal, Ghizer	Raushan
5	Gil gl 612	End Moraine	2750	1	Darkut, Ghizer	
6	Gil gl 621	End Moraine	4425	12	Sandhi, Ghizer	Yasin
7	Gil gl 656	Supraglacial	2900	2	Hinarchi, Gilgit	-
8	Gil gl 658	Supraglacial	3330	5	Gargho, Gilgit	Bagrot
9	Hunz gl 13	Blocked	2360		Attabad, Hunza	Hunza
10	Hunz gl 14	Supraglacial	2880	4	Ghulkin, Hunza	Hunza
11	Hunz gl 16	End Moraine	2560	3	Passu, Hunza	Hunza
12	Shyk gl 223	End Moraine	4850	26	Hasanabad, Ghanche	Ganche
13	Shyk gl 247	End Moraine	4678	19	Lunkha, Ghanche	Ganche
14	Shyk gl 255	End Moraine	4830	18	Khaplu, Ghanche	Khaplu
15	Shyk gl 262	Valley	4540	10	Barah, Ghanche	Barah
16	Shyk_gl 265	End Moraine	4520	11	Barah, Ghanche	Khaplu same Valley
17	Ind gl 400	Cirque	4880	9	Kharmang	Kharma
18	Ind_gl 407	Cirque	4750	15	Kharmang	same valle
19	Ast gl 6	End Moraine	4730	23	Perishing	Astor sa
20	Ast gl 24	End Moraine	4750	25	Perishing	valley
21	Ast_gl 160	End Moraine	3875	16	Rattu	Gorikot
22	Ast_gl 189	End Moraine	3600	22	Rupal	Astor
23	Shin gl 12	End Moraine	4460	24	Astor	Astor
24	Chi gl 94	Valley	3655	21	Laspur, Chitral	Laspur
25	Chi gl 26	End Moraine	3654	13	Madaklasht, Chitral	Madakla
26	Chi gl 108	Supraglacial	4615	17	Arkari, Chitral	Arkari
27	Swat_gl 20	End Moraine	3886	14	Shiringal, Kumrat, Dir	Kumrat
28	Swat gl 159	End Moraine	4033	6	Utrar, Swat	Utrar
29	Ind_gl 45	End Moraine	4500	31	Kandia	Dassu
30	Ind_gl 148	End Moraine	3950	32	Kandia	
31	Ind_gl 747	End Moraine	4150	30	Auchai	Dassu
32	Ind_gl 804	End Moraine	4050	29	Leo	Pattan
33	Additional lake in Kaghan	Cirque	4100	28	Kaghan, Mansehra	Kaghan

- Three multidisciplinary teams of PMD, PDMAs, Agri. Dept., EPA, Forest Dept and district administration constituted and ground truthing and field assessments have been initiated;
- Assessments completed in 9 valleys-Laspur, Madaglasht and Arkari valleys (in Chitral district), Utror and Bishigram valleys (in Swat district), Sandhi and Darkut valleys (in Ghizer district), Ghundus valley (in Kharmang district) and Bharah valley (in Ghanche district).
- In view of the emergency due to surging of Shishper Glacier and formation of glacial lake at Hassan Abad, upper Hunza, GB DMA and district administration requested GLOF-II project to provide support in installation of EWS. Accordingly, a project sponsored joint mission of experts from PMD and GBDMA analyzed the site and installed an EWS.

2.6 Awareness raising and capacity building of communities and stakeholders;

- Exposure visits of KP and GB line departments were conducted to Bindo Gol Valley, GLOF-1 project site in Chitral, on 1st July 2019.
- Training/ planning workshop was organized for KP Line departments on 20th -21st June 2019 at Mingora Swat to properly plan their activities, ensure coordination among the departments and learn about the technical, financial and communication reporting required under the UNDP system.
- Procurement of equipment and supplies for the District Emergency Response Cells in the 15 target districts has been initiated. The ITBs have been advertised on websites, links given below. The equipment will enhance capacities of DERCs/ DDMUs in responding to emergency situations.

UNDP CO Website: 1. http://www.pk.undp.org/content/pakistan/en/home/operations/procurement0/undpitb-2019-300---supply-of-emergency---rescue-items-.html UNDP 2. Global Website: http://procurementnotices.undp.org/view_notice.cfm?notice_id=57647 3. UNGM: https://www.ungm.org/Public/Notice/94040

A joint team building training and planning session was organized at Islamabad on 7^{th-}8th August 2019.

- Adopt a Tree Campaign was launched in GB on 23rd and 26th July 2019 by Malik Amin Aslam Khan Advisor to Prime Minster on Climate Change. A total of four planting events have been organized in KP and three in GB planting around 3000 plants.
- Glacial Cleaning Campaign was launched in GB on 26th July 2019. Three teams of volunteers were sent for collection of waste and safe disposal at Ghulkin, Passu and Batura glaciers.

2.7 Monitoring and Evaluation

To fulfill reporting requirements of GLOF-II project, GCF M&E, Annual Progress Report and Quality Assurance for UNDP, a robust and effective Monitoring and Evaluation System for the project is required. The following table illustrates the type of the reporting template developed with the outcome it tends to achieve:

S.No	Name of Report	Report Outcome
	GLOF-II Project, Key	-Helps to track project performance
1	Performance Indicators Reporting	-Assists to update achievements against targets on agreed timeline
		-Provide consolidated progress
2	CLOE II Output trackor	-Provide PIU/division wise progress
2	GLOF-II Output tracker	-Provide Districts/ valley wise progress
		-Provide quarter wise progress
		-Total number of people benefited
		-District wise beneficiaries' detail
3	GLOF-II Beneficiaries Tracking Sheet	-Activity wise beneficiaries' details
		-Quarter wise beneficiaries' detail
		-Gender, disability, senior citizen data for inclusion
		-Helps to inform about project progress
4	Consolidated Progress Monitoring Report	-Assists PPC to ensure activities implementation as per standards
		-Inform PPC/ management about field challenges/ recommendation
		-Inform PCC/ NPM about the project progress
5	Monthly Project Progress Reporting	-Provide data to prepare project updates
	heponing	-Create data pool for annual reporting
		-Capture field implementation status
		-Inform PPCs/ IP about field implementations
6	Field Visit Report	-Identify challenges/risk and recommendation for smooth implementation
		-Sufficient data collected to prepare monthly progress report
		-Inform PPCs/ NPM about the activities carried out
7	Activity Report	- Collect gender wise, disable and senior citizen
/		beneficiary numbers -Document participants observation/ feedback/ lesson learnt/ suggested actions for future

3. Bottlenecks and support needed

- Evaluation of technical proposals of ICs and RFPs received against the advertised 7 consultancies is pending due to non-confirmation of MoCC's representative to participate in the panels' meetings. As the applications are valid for a limited time and delays may result in starting the process all over again.
- Approvals of 2nd batch of TORs, and work plan for MoCC component are awaited. Approvals need to be given to keep the project activities going.

4. Next Plan of Action:

- Finalize procurement of consultancy services and conduct baseline studies
- Transfer funds to GB P&D for provincial activities;
- Finalize the ongoing initial assessments and feasibilities by PMD and line departments;
- Finalize HVRAs and GIS Mapping and ground truthing of highly GLOF vulnerable valleys;
- Selection of sites and construction of small flood protection infrastructure by PDMAs;
- Repair and rehabilitation of irrigation systems, and installation of drip irrigation/sprinkler irrigation systems, water efficient farming technologies
- Procurement of IT equipment and furniture for Climate Change Cells by provincial line departments;
- Finalize procurement of emergency and relief equipment for DERCs;
- Organize exposure visits for project stakeholders to project sites;
- Organize three international study tours and facilitate and sponsor Advisor MoCC's participation in the climate summit in New York
- Organize the remaining sensitization and awareness raising events for local communities and stakeholders;
- Carry on the volunteer plantation and glaciers cleaning campaigns in project sites;
- Organize media awareness campaign and print resource material;
- Provide support to KP-DMA in broadcasting the awareness programs, knowledge sharing and alerts in local languages Khwar in Chitral and Turwali in Swat Kohistan through dedicated radio channels; same to be done for GB.

5. Provincial Activity Details:

A. Khyber Pakhtunkhwa

GLOF-II Project KP Chapter launch was organized in Chitral on 2nd July 2019. The participants of the events were mainly from Civil Secretariat Peshawar, Federal Government and District Administration including line departments of Chitral, Members of Provincial assembly, community members and GB Government Officials and GLOF II project team.





Exposure visit to GLOF-I Project site - Bindogol

GLOF-II Project KP Soft Launch at Chitral

Line Departments and Stakeholders exposure and learning visit to GLOF-I project site in Chitral was carried out on 1st July 2019; all stakeholders were briefed by local community members about the GLOF-I project activities, challenges, successes and lessons learnt. The officials were requested to keep the previous valleys involved in the GLOF-II Project activities.

Line Departments and Stakeholders visit to GLOF-II project potential site in Chitral was conducted on 3rd July 2019. Community members of the potential valley warmly welcomed the Secretary Relief, Rehabilitation and Settlement (RRS) along with line departments representatives and

GLOF-II project team. Secretary RRS including Line Department Representative were briefed by the local community members about the GLOF events, disasters and vulnerabilities related to local community members and their expectations from GLOF-II Project. Community members also voluntarily initiated plantation in the Arkari valley, Chitral with support of GLOF-II Project and planted 1000 plants provided by Forest Department of KP in one day by mobilizing students, women and community members.



Kicking off the plantation activity at GLOF-II Project site



Plantation Activity, Upper Chitral

Community sensitization and awareness sessions were conducted on 30th August 2019 in Shringal Valley;1000 trees were planted by students and community members in Shringal and Kumrat Valley. Plantation activity and awareness session were also organized in the community of Reshun Valley in Upper Chitral on Monsoon Plantation day where 250 plants were provided by forest department. School Children, women and community members participated in the waste collection and plantation organized by GLOF-II Project.

This contributes to the Clean and Green Program set forth by the Prime Minister of Pakistan.

P&DD KP opened a bank account at Bank of Khyber, KP and requested for 1st tranche forwarded to UNDP, transfer of which has been carried out. Other responsible parties have also initiated the process of opening bank account and Finance Department is in contact for NOC.

Nomination of focal persons from Line Departments of KP for ground truthing activities of potential GLOF-II sites was done in close coordination with Pakistan Meteorology



PMD team for ground truthing activity

Department (PMD) to initiate community mobilization, formation of Community Based Disaster Management Committees (CBDRM Committees) and identification of feasible sites for flood protection structures, slope stabilization and irrigation infrastructures. PMD constituted team are implementing planned activities, including ground-truthing along with representatives of line department. Team is in the process of assessing Potential GLOF valleys (as approved in Pro-Doc and PARC/PMD Report of 2016).



Rescuing the local community in GolainGol valley, Chitral

GLOF incident happened in Golain Gol valley of Lower Chitral on 7th July 2019, which had devastating effect on local community and infrastructure of Golain Gol valley. CBDRMC and early warning system installed at Golain Gol valley responded well to the situation and provide shelter/accommodation to the locally displaced people, till response came from Relief and Rescue department. GLOF-II Project in close coordination with PDMA, Relief and Rescue

department and district administration provided all the support needed to community.

GLOF-II Project Chitral office furniture and IT equipment requirements are shared with common services of UNDP, Equipment and furniture will be delivered to Chitral once procurement process is complete.

Initial Coordination meeting was held with District administration of Chitral upper and lower separately. Meeting was attended by District administration including community members to discuss the project objectives and intended plans for the implementation of the activities in the target valleys.

KP Office facilitated Government Officials of GB in experience sharing and learning visit to KP in August. Meeting was organized with ACS P&DD KP, Chief Economist P&DD KP, Secretary RRS and Agriculture department of KP.

Emergency Response Cell equipment bids evaluation process is initiated and would be finalized by end of August 2019 with members from Provincial Line Department of KP.

MoU was signed between KP-DMA and CDPM-University of Peshawar to conduct Hazard Vulnerability Risk Assessment (HVRA) activity in the GLOF-II Project targeted valleys.



محدر بليف بحال وآبادي في بخونوا Radio distribution by KP DMA and GLOF II, Chitral



P&DD GB visit to P&DD KP experience sharing

KP-DMA with

support from GLOF-II Project distributed radios in the potentially vulnerable valleys of GLOF-II Project. GLOF-II Project will facilitate the KP-DMA in broadcasting the awareness programs, knowledge sharing and alerts through dedicated radio channels.

Coordination workshops were held in Chitral Upper on 20 August 2019, Chitral Lower on 21 August 2019 and Dir Upper on 29 August 2019.

B. Gilgit Baltistan

Project soft launch ceremony of GLOF II KP Chapter was attended by the GLOFII staff GB and the heads of GB line department on 2nd July 2019 in Chitral.

Security assessment of GLOF II office Skardu office was done by UNDSS and the Additional Chief Secretary Development GB. P&DD Sub Office Skardu was selected as feasible place for establishment of GLOF II Field Office, Skardu.



GLOF II Soft Launch, Chitral

UNDP has hired key project staff (Provincial Project Coordinator, GB who joined office on 15th July 2019, Field Officer, Skardu who joined on 29th July, 2019 and Admin & Finance

Assistant, Skardu) for GLOF II project in GB. Provincial Office Gilgit and the Field Office Skardu are now operational.



Meeting with Chief Economist KP, Peshawar **interventions in the Province.**

Additional The Chief Secretary Development GB with Head of line Department visited KP Government Departments for experience and knowledge sharing and visited KP Provincial Disaster Management Authority. A meeting was arranged with the Secretary Relief KP and DG KP DMA to discuss their experience on disaster related activities and operations of PDMA in KP. The team also visited Chief Economist P&DD KP and shared their experience and

A Meeting was arranged with the Baltistan Commissioner Division to finalize valleys for ground truthing in the reaion said where the Deputy Commissioner Skardu, Additional Deputy Commissioner Skardu, Assistant Commissioner Shigar, DC P&DD, DFO Forest Dept, Representative of WMD Skardu and AD GBDMA Skardu attended the meeting. It was decided that PMD team



ACS GB Meeting with Chief Economist KP, Peshawar

(Qarqolti and Assumber) and on the directives of Commissioner Baltistan Division, the team deputed at Baltistan visited Ghundus in Karmangh District and Bhara Valley at Ghanche District.



will PMD visit to GLOF II Project sites

visit the Ghundus in Karmangh District and Bhara in Ghanche District. It was also decided the Commissioner Office will consolidate a list of vulnerable sites which will be given to PMD for further assessment.

After meeting under the chairmanship of Deputy Chief P&DD the team of PMD, GBDMA, Forest Department, Water Management Department and Team of GLOF II started visit

of 4 valleys (2 in Gilgit Division and 2 in Baltistan Division). The team visited Darkut Yaseen and Sandi



GLOF II Project Team building workshop, Islamabad

Team building workshop was arranged by UNDP to familiarize the stakeholder and line departments to their ToRs and Task assigned in GLOF II execution process. The line departments of KP and GB participated in the workshop and shared their views. It was twoday long session where all the stakeholders actively participated and gained knowledge on improved team coordination for effective implementation of GLOF II Project.

GLOF-II GB team visited communities of Ghulkin, Hussaini and Passu for finalization of arrangements and programmes for the visit of Advisor to PM on CC to GB. The team met the committee members of Ghulkin, Passu and Hussaini and constituted a committee consisting of 6 members:

- 1. Mr. Hussain Ali (Passu) Chairman
- 2. Mr. Asif Hussain (Hussaini) Secretary
- 3. Mr. Sifat Ud Din (Ghulkin) Member
- 4. Mr. Shoukat Ali (Ghulkin) Member
- 5. Mr. Aman Karim (Hussaini) Member
- 6. Mr. Ejaz (Passu) Member

The committee was responsible for the following tasks:

- a. Organizing the communities
- b. Coordinating with communities for selection of members and notables for main programme; area for programme and plantation; team for glacier cleaning campaign and plants for plantation.



Meeting will Local Communities at Ghulkin, GB



- c. Conducting programmes at different venues during Advisor's visit particularly at upper Hunza, Gojal.
- d. Ensuring proper execution of the three-day cleaning campaign at the selected Glaciers of Upper Hunza and handing over of the collected solid waste to GLOF II team for further treatment and research purposes.

On 23rd August 2019, Advisor Prime Minister to inaugurated the GLOF II project office in Gilgit accompanied by Chief Secretary GB, Additional Chief Secretary Development GB, Secretary Home, Secretary Forest and Wildlife GB. Commissioner Gilait Division,



Deputy GLOF II Project office Launch, Gilgit

Commissioner Gilgit, National Project Manager and other staff of GLOF II project also attended the inauguration ceremony.



After inauguration session all the higher authorities attended a coordination meeting with Advisor at the Conference Hall of Chief Secretary Office where the NPM GLOF II and the team of 10 Billion Tsunami presented their project brief and progress. During briefing, the Advisor advised the GLOF II team to channelize the CBDRM Fund of Community Hazard Watch Group with the National Disaster Management Fund to ensure the sustainability of the CBDRM Fund. In addition

Advisor Meeting with GLOF II Stakeholders, Gilgit to this, the Advisor assured the GB Government for full support from the Federal Government in all the projects initiated by the Ministry of Climate Change.



Launch of Tree Plantation Drive at KIU, Gilgit

Local students of Nalter Bala participated in the cleaning campaign at Naltar Lake. Advisor strongly condemned the human infrastructures built around this unique ecosystem and asked immediate action to be taken to conserve it.

The delegation visited KIU where Advisor inaugurated the plantation drive titled as "Adopt a Tree", where he planted a tree for being adopted by a student of the university.

Following this, Advisor left for Naltar Valley for cleanup campaign on 24th August 2019.



Cleaning campaign of Satrangi Lake, Naltar



Launch of Tree Plantation Drive at KIU, Hunza

On 25th August 2019 the Advisor visited Hoper valley and glacier and visited the Snow Leopard project and under the Snow Leopard Foundation (SLF).

On 26th August 2019 the team visited KIU Hunza Campus and inaugurated the "**Adopt a Tree**" Campaign in collaboration with the KIU Hunza Campus. The Advisor addressed a big student gathering including a large majority of girl

students. A WhatsApp group was also created with the name "GLOF II KIU Adopt a Tree"

and the same was shared with the students by the Advisor and the students were assured that Advisor himself will monitor the progress on the group.



Meeting with communities of Ghulkin, Passu and Hussaini, Ghulkin

After the session at KIU Hunza, the team visited Ghulkin village and met the community members of Ghulkin, Hussaini and Passu village. A reception was organized by the committee members of the villages for the Advisor as Chief Guest.



لوجال - دزياعظم باكتان بحريرا بي موسياتى تهديلى هك شن الممان، وى ق، تى بان وى المحارف عاص محاف المستخطن با ويجت غيرهما برايم بين محترد منزا غيروا كردا تركولا كمري تحكس كوبل مدا يقاني كرد بي تر

The community presented gifts to the guests and presented a resolution related to Plantation and GLOF mitigation work required in the communities living in the hazardous areas. After attending the session at Ghulkin the team moved to Hussaini for plantation and attended the plantation drive where the



3rd activity was at Borith Zero point where 60 Tree Plantation Drive at Hussaini youths (Male/Female)



were gathered from the above mentioned 3 communities. Three teams were constituted and dispatched to three Glaciers (Borith, Passu and Batura) for the cleanup of the glaciers. The said

Visit to Passu Glacier for Glacier Cleaning Campaign

activity was designed for 3 days. The teams will gather all the waste from the glaciers, which will later be segregated and studied to find out whether the waste collected is creating any hazard for the glaciers and the kind of interventions required will be analyzed.

This was followed by a presentation from the Passu village regarding past GLOF event and its impact on the community's cultivation land. The community briefed the Advisor on the Past GLOF event and brought his attention to



Presentation by local community at Passu village, Passu

the erosion caused by the Shimshal Valley River and diversion of Shimshal valley river through a tunnel to Hunza River. The Advisor directed GBDMA to submit a report on the issue highlighted by the community representatives of Passu Village. After Lunch at Passu the Mission moved to Gilgit and the mission ended on 27th August 2019.

"Adopt a Tree" an initiative towards Clean and Green Pakistan- a human story

Gulistan Rani, student of biological sciences at Karakorum International University, Hunza Campus, adopted a tree with a scientific name Cedrous Deodara and planted it in her university campus under the "Adopt a Tree" campaign launched by GLOF II Project as a contributor to Prime Minister of Pakistan's Clean and Green Campaign.

Ms. Gulistan is committed to contribute to the cause of tree planation in her region which is exposed to the adverse impacts of climate change making it most vulnerable to natural calamities. When inquired about her willingness to be part of this initiative she said, "I have taken the responsibility of looking after this plant and pledged my oath to the Advisor Malik Amin Aslam Khan that I will take care of it properly until it becomes a mature tree. I have started a mission to plant trees and take good care of



as many as possible. I will create awareness among my communities including youth, women, children and the elderly people and convince them to plant at least 10 trees in a year for greater sustainability of our area that is rapidly degrading due to increased temperatures".

She further highlighted the importance of trees as the most effective means to capture and store carbon for the planet, by absorbing carbon dioxide and releasing oxygen essential for all humans and other living creatures. She further elucidated the fact that life can survive without food for days, without water for weeks but cannot survive without oxygen even for a few minutes; this alone summing up the importance trees have in our ecosystem and hence putting greater responsibility on us to restore what we have destroyed.

Being a student of biological sciences, she very well understood the impact of tree planation on environment, as trees help stop negative impact of climate change by removing carbon dioxide from the air, that is the major cause of global warming. When trees are cut and burnt as fuel wood, the stored carbon is released into the air as carbon dioxide which is one of the most active agents of climate change having negative impact not only on our health but also our glaciers resulting in GLOFS and flash floods. Therefore, deforestation is contributing directly towards global warming, so planting of new forests can help mitigate climate change and reverse the process of global warming.

Gulistan, is enthusiastic to lead this campaign and work as an *Ambassador* to promote this initiative in her area. She aims to run this campaign as a part of her education in District Hunza and Nagar through involvement of local students in schools and colleges and further

advocate it to religious institutions and community organizations to adopt a tree and plant at least 10 trees in year.