

QUARTERLY TECHNICAL PROGRESS REPORT

IMPROVEMENT OF CKNP MANAGEMENT SYSTEM AS MODEL OF MOUNTAIN ECOSYSTEMS IN NORTHERN PAKISTAN

July-Sep 2018



Rash lake, Hoper valley Nagar

WORLD WIDE FUND FOR NATURE PAKISTAN

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2. LIST OF ABBREVIATIONS

CKNP	Central Karakorum National Park
DNP	Deosai National Park
EPA	Environmental Protection Agency
GBFWED	Gilgit-Baltistan Forest, Wildlife and Environment Department
GB	Gilgit-Baltistan
IUCN	International Union for Conservation of Nature
KIU	Karakorum International University
LPGA	Local Project Advisory Group
UNDP	United National Development Programme
WWF	World Wide Fund for Nature

3. PROJECT SUMMARY:

Project Name:	Improvement of CKNP Management system as model of mountain ecosystems in Northern Pakistan
Funded by:	UNDP-Pakistan
Project period:	April2018 – December 2019
Reporting period:	July2018 – September2018
Report submitted on:	October 10, 2018

4. BACKGROUND

The Central Karakorum National Park notified by the Government of Pakistan in 1993, is the perhaps the largest National Park of the country (approx. 10,000 sq km plus 7,500 sq km buffer zone), characterized with diverse and fragile mountain ecosystems. The park is internationally famous for K2 worlds’ second highest peak, Glaciers, Lakes and other tourist attractions, rich biodiversity, and high ethnic cultural diversity. The Park, somehow remained least focused till the recent past, when Northern Areas Administration realized the need for scientific management of its depleting natural heritage by conceptualizing a project titled “Participatory development and management of CKNP” under a contract arrangement with WWF - Pakistan, followed by a collaborative implementation mechanism involving partners like WWF, IUCN through HKKH Partnership for ecosystem management project, and Ev-K2-CNR funded Karakorum Trust project, for the respective activity components. The project provides for but not restricted to integrated and participatory planning, implementation and evaluation approaches to ensure sustainable development and tangible conservation of park’s resources for improved livelihoods of the dependent communities in the buffer zone areas with the main thrust on promotion and development of eco, adventure and cultural tourism in the area.

The Park is acutely deficient in terms of vegetative cover, which is posing greatest threat to Biodiversity and livelihoods of the resident communities, living in the buffer zone. The estimated forest cover is fairly varying, ranging from 12% in Gilgit to less than 0.3% in Skardu, Shigar and Ghanche districts. However, pastures and alpine meadows are about 20% of the total area. Major portion of the Park comprises of glaciers, vast scree slopes, rangelands and snowcapped Rocky Mountains, and thus a very meager area (1%) is available for subsistence agriculture. The traditional farming style is not much yielding under dry deserted and temperate agro climatic conditions.

CKNP supports a great variety of fauna, including 12 species of mammals, 23 species of reptiles, 6 species of amphibians, 17 species of native fish and a wide array of floral species, which are yet not identified and documented. Majority of the flora and fauna species, like Junipers, Vibernum, Snow leopard, Astore Markhor, Ladakh urial and Musk deer are endangered and endemic to the Central Karakorum highlands.

Approximately, a population of 113,000 souls, belonging to nine different ethnic groups is living in 230 villages, in the peripheral areas of the park. Majority of this population is characterized with subsistence farming, mining and livestock herding. A significant number of youth are engaged in tourism sector, working as high altitude porters, guides, cooks and trekking leaders.

The CKNP is the largest protected area present in the Karakorum Range of Pakistan. Since many years unmanaged tourism activities coupled with unsustainable exploitation of natural resources by the tourists, tour operators and buffer zone communities, have been putting tremendous pressure on the scarce and scattered natural resource base of the park.

To overcome issues related to the conservation of natural resources and management of the park, WWF-Pakistan is implementing the project jointly with park communities, EV-K2-CNR, Directorate of Central Karakorum National Park (CKNP) and Desai National Parks and Wildlife Department, Gilgit-Baltistan.

5. REPORTING CONTEXT

The present report gives a brief account of the progress UNDP-Pakistan funded CKNP project during July-September, 2018. It also elaborates on some constraints faced and strategies adopted by the project team. A few, suggestions to sustain the efforts made for improved management and conservation of natural resources in the project area are also covered in the report.

6. Progress of the Project

Activity Result 3.0: Project communities mobilized for implementation and ownership of interventions:

After the inception of project, WWF-Pakistan project team in collaboration with directorate of Central Karakoram National Park (CKNP) and Deosai National Park (DNP) mobilized the communities around both parks for joint implementation and ownership of the project interventions. The selected communities through resolutions have showed their consent to fully own the project interventions and have also assured the project team to collaborate with WWF, UNDP, EvK2CNR and park management in conservation of natural resources of the parks. Terms of Partnerships (ToPs) have also been signed with CBOs of all selected villages. (For Details please see Annex-I)



Figure 1: Mobilization meeting with Rahimabad Development Organization, Rahimabad valley, Gilgit

Activity 3.0: Conduct Local Project Advisory Group Meeting

Local Project Advisory Group (LPAG) was formed in the second quarter of the project to seek advice, guidance and technical input for smooth implementation of the project. As per the approved ToRs of the LPAG, WWF has been selected as secretariat for the Phase-I of the project and EV-K2-CNR for the phase-II.

WWF-Pakistan organized the first quarterly meeting of the LPAG on July 9, 2018 at WWF-Pakistan's office Gilgit. The meeting was chaired by Mr. Yaqub Ali Khan, Conservator, Parks & Wildlife Department, Gilgit-Baltistan. Participants from Karakorum International University, Baltistan University, Agriculture, Livestock, Environmental Protection Agency, EV-K2-CNR, Tourism and CKNP attended the meeting. Meeting minutes with action Point have been developed and circulated with all members of LPAG. (For details please see Annex-II)



Figure 2: Local Project Advisory meeting held at WWF Regional Office Gilgit

Activity Result 3.1(a): Assessment Report on impacts of climate change on biodiversity and livelihoods:

Pakistan has been ranked among the top three most affected countries for its vulnerability to the impacts of climate change. Central Karakorum park and Deosai National Park are considered to be highly fragile and at risk of major disasters in the current scenario of rapid climate change. For this purpose study has been carried out to know the impact of climate change on the biodiversity and livelihoods of the people living around both the parks.

The survey findings shows that climate change is emerging as a very serious threat to the biodiversity of the region and it is also altering the livelihoods of the communities living around the parks. It has been noticed that some of the wildlife species have been reported as locally extinct from certain areas like, Ladakh urial once was the common species in Nagar valley and Hoper valley is no more due to excessive hunting in the past. Agricultural [productivity is also reported to be decreased for many reasons including the excessive use of pesticides, erratic rain falls, attack of pests etc., all attributed to climate change. (For details please see Annex-III)



Figure 3: During data\ collection process in Hoper (Nager)

Activity Result 3.2: Current and alternative income options for local communities assessed:

A comprehensive questionnaire has been conducted to get the overall perception of the community regarding existing income sources, potential for new options in all selected villages of the project site. For data collection, 100 households were randomly selected from three districts of GB, i-e, Nager, Gilgit and Skardu. The Study concluded that mostly people are engaged with agriculture as their primary source of income or dependent on livestock herding for their subsistence as well as for fulfilling other needs. They face many problems related to their livelihood option like there aren't proper marketing facilities for agriculture products; moreover they need climate smart and water management technologies to expend available barren land. (For details please see Annex-IV)



Figure 4: Our enumerators are busy with taking Key Informant Interviews in Dobani Development Organization(.Village Harmosh, District Gilgit)

Activity Result 3.3(a): Assess Current Built Environment (building and Construction) Document its impact on indoor environment in the selected villages:

A comprehensive report has been prepared on assessment of Current built environment and its impact on indoor environment. Our study area comprises of three villages of Skardu and two villages from District Gilgit and Nagar each. The Survey has been done through specific questionnaires and personal interviews with men and women both. Enumerators were hired and trained for data collection and data entry. Data was analyzed and presented in forms of graphs and tables. The analyzed data suggested that community living in CKNP and neighboring villages almost have traditional home, attached with two rooms and a kitchen, the wall of the homes are made up of stone while roof was constructed by using wood and clay. Smoke emits from traditional stove are dangerous for their health, especially women who use the traditional stove for cooking. The study also reveals that cracks, leakages and peeling paint in houses have a linkage with depression, anxiety and mood swings. (For details please see Annex-V)

Activity Result 3.4: Pilot Subsistence farming through water efficient technologies and climate resilient crops on at least 500

Under this activity result, WWF-Pakistan has to select sites for the piloting technological innovations like introduction of hydro Ramp Pump, Mobile Solar Water lifting pumps and install high efficiency irrigation system like drips and sprinklers and to install the vegetable tunnels for the provision of vegetables in offseason (winter).

So far WWF-Pakistan in collaboration with Green Tech has been able to design the new mobile solar water lifting pump and hydro ramp pump with increased output (2 inches) and the procurement process has been completed. The installation process of the equipment is in process. Similarly, for installation of the tunnels the material has been procured and installation process is in process.



Figure 5: Newly designed mobile solar water lifting system



Figure 6: Newly designed Hydro ramp pump

7. Challenges:

- During data collection Process for study on impact of climate change on biodiversity and livelihoods, female respondents were unfamiliar about wildlife, medicinal plants and glaciers.
- It was difficult to make them understand about linkages of climate change's impact on biodiversity and livelihood.
- In order to get data for three research studies within one month, Time was major constraint sample size was large and targeted valleys were totally isolated from each other.
- The respondents didn't know the exact quantities of crop and fruit product and exact land holdings.
- After mobilization meetings, it was perceived that local communities are not likely to support any park unless they get both tangible benefits.

8. ANNEXURE

Annex-I: Community Resolutions, Signed ToPs, Activity Reports

Annex-I: LPAG Meeting minutes

Annex-III: Draft Report on Climate change Impacts and recommendations

Annex-IV: Draft Reports on Existing and alternative livelihood options for the communities living around CKNP and DNP

Annex-V: Draft Report on Built Environment