

**PROJECT DOCUMENT****PAKISTAN**

Project Title: Water for Development (W4D): Support to mountain sustainable development and adaptation policies

Project Number: 01002665

Implementing Partner: EVK2CNR Italy

Start Date: September 2024

End Date: August 2027

PAC date: 10th May 2024

LPAC date: 16 May 2024

Brief Description

The project aims to increase the climate adaptation and resilience of Gilgit Baltistan Province – which is one of the most fragile in the country from an ecosystem perspective – in order to contribute to the promotion of sustainable and inclusive development in mountainous regions. Despite the high vulnerability to climate change-related risks and the existing national policy and strategy framework, there are still important scientific and technological gaps in the country that do not allow an appropriate definition and management of environmental risk prevention systems, as well as the effective and evidence-based implementation of policies and strategies for sustainable management of natural resources. To meet the challenges of climate change the institutional and community capacity to safeguard the ecosystems and to manage natural resources, especially water resources as determinants of development, has to be increased. More specifically, in line with the priorities of the National Climate Resilience and Adaptation Plan 2023-2030 (NAP), the project aims to:

- (1) Improving water resources management and disaster risk management through monitoring activities of glaciers about climate change, collecting, processing and sharing data with local authorities, Environment Protection Authority and Disaster Management Authority and with local universities, Karakorum International University and University of Baltistan;*
- (2) Improving the quality management of agriculture and livestock by establishing phytopathology and zooprophyllaxis laboratories aimed at promoting, in cooperation with the Dept. of Agriculture, Livestock and Fisheries sustainable agriculture and livestock practices.*
- (3) Promoting sustainable tourism as a strategic sector for environmental conservation and job creation. The initiative will adopt a community-based and value-chain approach to contribute, in partnership with the GB Dept. of Tourism, to boost an inclusive and sustainable model of local development.*
- (4) Enhancing the capacity of local governments and communities in sustainable management of natural resources and mountain ecosystems, through training and capacity-building activities, and awareness campaigns addressed to institutions, communities and the private sector.*

Contributing Outcome (UNSDCF, CPD, RPD):**UNSDCF Contributing Outcome involving UNDP 3:**

By 2027, people living in the Indus River Basin, particularly the most vulnerable, including women, girls, boys, persons with special needs and senior citizens, will have their lives positively impacted by improved water access and utilization, economic development, livelihoods, climate-resilient settlements, and prosperity.

CPD Outputs 3.2:

Output 3.2. Efficient and sustainable use of fresh marine and terrestrial ecosystems, including the Indus Basin, for resilient communities through interventions for improved health, livelihoods, green economy and clean energy

Indicative Output(s) with gender marker¹:

1. Monitoring of glaciers and water resources is improved for drinking and agri-food purposes. With 30%

Total resources required:	EUR 3,000,000	
Total resources allocated:	UNDP TRAC:	
	Donor: Govt. of Italy	EUR 3,000,000
	Government:	
	In-Kind [UNDP]:	50,000 USD
Unfunded:		

female participation in capacity building interventions – GEN 2 2. Increased capacity for a sustainable management of agriculture and livestock value chain- GEN 2 3. Criteria and best practices for sustainable tourism value chain management are introduced and adopted at the local level- GEN 2 4. Local authorities and communities’ capacities to implement policies and practices for sustainable management of mountain ecosystems are strengthened – GEN 2.	
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Agreed by (signatures)²:

UNDP-Pakistan	Government of Gilgit-Baltistan	Implementing Partner EvK2CNR Italy
 Samuel Rizk Resident Representative	 Capt. (R) Mushtaq Ahmad Additional Chief Secretary, Gilgit Baltistan	 Agostino Da Polenza, President
Date: 7/6/2024	Date: 07/06/24	Date: 7/6/2024

² Note: Adjust signatures as needed

I. DEVELOPMENT CHALLENGE

1.1 Context and problems to be addressed

Pakistan ranks among the top ten countries that are most vulnerable to the negative effects of climate change³. Rising temperatures, melting glaciers, intense floods and droughts and rising sea levels are all a matter of growing concern in the country that, combined with deforestation and mismanagement of natural resources are causing progressive degradation of ecosystems and loss of biodiversity with adverse effects on development and economic growth.

According to data contained in the National Climate Resilience and Adaptation Plan 2023-2030 (NAP), Pakistan has experienced an average temperature increase of 0.63°C over the past century. Water, which is closely linked to precipitations and glaciers, is the main resource to be affected by climate change and is being impacted by environmental risks. In lieu of this stark reality, this project proposal intends to address water resources as determinants of ecosystems and development.

Natural disasters continue to erode GDP and threaten the resilience of the population, particularly the most marginalized groups with a lack of capacity and resources. The MPDS Gov Annual Plan 2023-2024 highlights that owing to the floods of summer 2022, the real GDP had a marginal growth of 0,3% during 2022-23, against the target of 5%. The inflation rate was recorded at 29.2% during July-May 2023 as compared to 11.3% in the same period of the previous year. As a result, 4.3 million people have temporarily or permanently lost their jobs due to the 2022 floods⁴.

In the northern regions of Pakistan, rising temperatures are accelerating the melting of glaciers causing increasingly frequent flooding. As reported in the NAP, Pakistan has more than 7,000 glaciers and the rapid melting of glaciers has led to a 300% increase in glacial lake outburst floods (GLOFs). More than eighty percent of the country's glaciers are located in Gilgit Baltistan (GB) province, precisely where this project intervenes. The glaciers of the Hindu Kush Himalayas face the risk of losing up to 80% of their volume by the end of this century. This would pose a serious direct threat not only to Gilgit Baltistan's (GB) population of about 1.5 million – 90% living mostly in the agriculture economy, but more broadly to Pakistan's agricultural sector, representing a challenge to the distribution of water in the country and leading to increased competition among communities for natural resources. In particular, the Upper Indus Basin (UIB) – where irrigation systems based on glacier and snowmelt have been established – is highly dependent on water resources, and an accelerated glacial melting due to climate change could significantly threaten future water availability (Nazeer et al., 2022) with negative consequences for agriculture and the local economy.

According to the National Climate Resilience and Adaptation Plan 2023-2030 (NAP), Pakistan might mitigate the effects of climate change and reduce its related economic losses by engaging in adaptation and resilience strategies. Creating employment opportunities represents one of the strategic pillars of the Annual Plan 2023-2024 aimed at increasing the population's resilience. Within the NAP framework, the strategic value and importance of creating employment opportunities in sectors that increase environmental sustainability such as ecotourism, sustainable agriculture, and renewable energy has been well-explained. Moreover, in line with the NAP, the Annual Plan 2023-2024 emphasizes that tourism is expected to gain momentum and play a key role in the economic development of the country, especially in light of its huge potential at the sites of natural and cultural heritage.

Pakistan has signed the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol to the UNFCCC, the Paris Agreement and the Convention on Biological Diversity. Within the framework of these multilateral agreements, Pakistan has adopted national-level policies and strategies to protect the environment and ecosystems and to facilitate climate adaptation, in particular, the National Climate Resilience and Adaptation Plan 2023-2030 (NAP); Living Indus in 2022; the National Pakistan Climate

³ Global Climate Risk Index, German Watch, 2021

⁴ Post-Disaster Needs Assessment – PDNA, 2022

Change Policy (NCCP) in 2021; the Nationally Determined Contribution in 2021; and the National Water Policy in 2018. However, despite the national policy and strategy framework and the high vulnerability to climate change-related risks, there are still important scientific and technological gaps in the country that do not allow an appropriate definition and management of risk prevention systems, as well as the effective and evidence-based implementation of policies and strategies.

The sectors of intervention and main issues to be addressed are detailed below.

Climate Change

Pakistan is highly exposed to extreme hydrogeological and climatic events, such as floods, droughts, and landslides. Consequently, rising temperatures are causing rapid melting of glaciers and frequent flooding. At the same time, due to climate change and overexploitation of water resources, water flow in the Indus River system is significantly reduced. Between 1990 and 2015, per capita water availability in Pakistan decreased from 2,172 to 1,306 cubic meters: the Pakistan Council of Research in Water Resources (PCRWR) estimates that the country could reach absolute water scarcity by 2025. As reported in the Climate Change Development Report⁵), climate change in Pakistan acts as an environmental risk multiplier, understanding the spatial distribution of climate risks and to what extent these risks affect social issues is essential to promote sustainable and resilient economic development over the long term. According to the CCDR, the magnitude of damage caused by climate change ranges between 4.5% and 9% of GDP by 2050, with a significant impact on the agricultural sector, which has a pivotal role in the national economy. The sector now absorbs about 40% of the workforce, 63% in rural areas, and contributes 23% of the national GDP⁶. In Gilgit Baltistan, as in the rest of the country, agriculture is one of the main economic sectors, both in terms of the labour force employed (45% of the total) and its contribution to individual income (41%).⁷

Agriculture – Water Nexus

The quantification of water availability in relation to climate change is essential for the sustainable management of water resources, as well as the understanding of the quality of water resources for irrigation and drinking is a key issue. The Pakistan Council of Research in Water Resources (PCRWR) Report 2021, highlights how in Gilgit Baltistan the water supply does not meet the national standards in terms of the presence of microbiological contamination (E. coli, in 68% of the samples analysed). The risk of contamination could have negative impacts on agriculture and livestock since it affects the marketing of products which do not comply with the national and international standards. The lack of appropriate investigations, data and scientific evidence on water resources quality represents a problem to be addressed to contribute to the Federal Government's Joint Sector Review- Drinking Water, Sanitation and Hygiene in Gilgit Baltistan (July 2019) which intends to provide access to drinking water to the total population of Gilgit Baltistan by 2025.

Job opportunities and sustainable tourism

The creation of job opportunities in order to increase the population's resilience is one of the strategic pillars of the MPDS Gov Annual Plan 2023-2024. The NAP stresses the strategic value of creating job opportunities in sectors that increase environmental sustainability such as ecotourism, sustainable agriculture, and renewable energy. As reported in the Annual Plan 2023-2024 and the National Tourism Strategy 2022, Pakistan has identified tourism as one of the drivers of economic growth, in line with the Agenda 2030 on Sustainable Development. The domestic tourism sector has grown in the country: in 2021 tourism accounted for 3.7% of the national economy. The Hindu Kush-Himalayan (HKH) region saw a major increase in visitor inflow, with about 700,000 local and international tourists visiting Gilgit-Baltistan in just three months of 2021, up from (62,000 in the same period in 2012) ⁸Domestic tourism in the province increased from 34,108 people in 2007 to 912,587 people in 2022, generating an economic value of 64.50 billion PKR, while

⁵ CCDR, World Bank, 2022

⁶ World Bank, DataBank, 2021.

⁷ World Bank, 2011.

⁸ GB Tourism Dept, 2012

international tourism reached 12,140 people in 2022, generating an economic value of 190 million PKR⁹. (The economic value generated also includes revenues, which can be reinvested by the provincial government for cultural and natural heritage protection and service development. The most visited cities were Skardu with 39.1% of visitors and Hunza with 20.2% of visitors; while the most relevant types of tourism included adventure tourism 44.2%, sightseeing with 22.8%, cultural tourism with 21.4%, and hiking and trekking 11.6%. Considering the tourism phenomenon in the province, it appears that the greatest potential investment opportunities are in tourism infrastructure, services and adventure activities¹⁰.

The World Economic Forum (2023) estimates that more than 50% of the global economy is moderately or highly dependent on nature. This link is even more relevant in Pakistan, in light of the recent increase in tourism. Therefore, sustainable practices, such as ecotourism and community-based tourism can contribute to safeguarding mountain ecosystems and increasing local communities' resilience. The Tourism Policy GB (2017) stresses the GB government's commitment to promoting sustainable tourism through the protection, conservation, enhancement, and management of the natural and cultural heritage. Tourism is a key sector in the GB economy: a report by the Pakistan Institute of Development Economics states that 50% of households in Gilgit Baltistan depend directly or indirectly on tourism. The increase in unsustainable tourism is causing environmental degradation, in terms of increased traffic, inadequate solid and liquid waste management systems, the proliferation of non-eco-sustainable hotel facilities, and the concentration of tourists along the few known routes. The lack of awareness about environmental protection both at the community and institutional level and the poor supply of eco-sustainable tourism services and facilities threaten the already fragile mountain ecosystem.

More specifically, based on the desk review and the findings collected during field visits carried out in Gilgit Baltistan, the following key problems to be addressed have been identified:

- Scarcity of data and scientific evidence on water resources availability;
- Limited technical capacity in monitoring glacier dynamics and water resources;
- Irresponsible use of natural resources;
- Insufficient technical equipment and technology;
- Weak capacity to respond to natural disasters;
- Poor knowledge concerning risk reduction strategies at the institutional level;
- Ongoing deforestation process;
- Inefficient irrigation systems;
- Unconscious use of fertilizers and pesticides with negative impacts on water resources;
- Use of unsustainable Agricultural and livestock practices;
- Lack of employment opportunities for youth;
- Rapid development of irresponsible tourism;
- Poor awareness of environmental protection and sustainability in the tourism supply chain.

1.2 Needs Assessment

Agriculture – water nexus

A deeper understanding of the agriculture–water availability nexus is one of the critical needs that have to be met, as highlighted by the Climate Change Development Report (CCDR, World Bank, 2022), the Nationally Determined Contributions¹¹ and the United Nations and Ministry of Climate Change "Living Indus" Initiative. This priority is also reaffirmed by the GB government's strategies such as the Climate Change Strategy and Action Plan (Gilgit Baltistan EPA, 2017). Water represents the main natural resource to be affected by climate and to impact land management and agriculture. Data and scientific evidence-based scenarios on water availability in terms of quantity and quality represent an essential need in order to improve the management

⁹ Investment Opportunities in Tourism Sector, GB Tourism Dept. 2022.

¹⁰ Investment Opportunities in Tourism Sector, GB Tourism Dept., 2022.

¹¹ NDC, 2021

of water resources and consequently, for a sustainable management of agriculture and livestock value chain. Concerning the water resources availability, several studies¹² and the World Bank (Glaciers of the Himalayas, 2021) identify as one of the main knowledge gaps the lack of an integrated glaciological-hydrological model for the Upper Indus Basin, which would be useful to provide estimations and projections about the current and future availability of water resources, especially for agriculture. It is estimated that about 45% of the entire Indus water flow is derived from glacial and nival melt, which means that the issue of water resource availability has to be addressed through comprehensive mitigation and adaptation strategies, including proper glacial monitoring and climate change impacts-based scenarios. Nevertheless, the need to improve knowledge and management of the water resource in a remote high-altitude region clashes with the scarcity of sound data, scientific evidence and adequate monitoring systems, as well as with the lack of a multi-sectoral scientific approach, due to the limited awareness at the institutional level and weak knowledge and capacity of local research institutions (the newly established Karakorum International University is ranked 54th out of 73 universities analyzed by Higher Education Commission, 2016. In reference to the water resource quality, what has been identified as a primary need for the province concerns the lack of a qualitative irrigation and drinking water analysis plan, i.e., a plan that tests the main chemical and microbiological parameters of drinking water at a certain frequency. In this regard, it is necessary to upgrade the water analysis laboratory installed over a decade ago by Project SEED (2013), strengthening the capacity of local technicians, university students, researchers and professors from the local research institutions (Karakorum International University in Gilgit and University of Baltistan in Skardu).

Sustainable agriculture and livestock practices

The lack of plant pathology laboratories in the province to implement diagnostic investigations to detect and classify pathogens of major crops is a limitation to the adoption of eco-friendly pest control strategies for the control of phytopathogenic microorganisms, with important repercussions for scaling-up up sustainable and organic agriculture. This is an area considered by the World Bank (2011) to be one of the most promising development opportunities for the province. Similarly, the lack of zoo-prophylaxis laboratories in the Province does not allow effective control of infectious and diffusive diseases of domestic and wild animals, with serious repercussions for the livestock sector and wildlife conservation as reported by the One Health Zoonotic Disease Prioritization¹³.

Sustainable tourism

The tourism industry represents a pivotal economic and job creation opportunity for local mountain communities (Investment Opportunities in Tourism Sector 2023, Government of GB, Department of Tourism). The added value of ecotourism lies in protecting the environment and contributing to the sustainable development of local communities by improving their socio-economic conditions and living standards¹⁴. In particular, community-based ecotourism¹⁵ has great potential in terms of cultural exchange, and human and economic development: It contributes to job creation for rural communities by mitigating the ongoing massive migration to urban areas. Moreover, it also promises a potential increase in economic opportunities for micro-enterprises, stimulates the sale of local products by small farmers, and promotes local cultures and traditions in festivals and events (Ecotourism could be key to protecting Pakistan's mountains¹⁶. However, local government efforts to generate a demand for ecotourism have been complicated by weak environmental knowledge and awareness, a lack of effective sustainable tourism models/good practices¹⁷, and limited ecotourism accommodation facilities.

With reference to the problems mentioned above, the following key needs have been identified:

¹² Zahra et al, 2023, Yu et al, 2013, Nazeer et al, 2022

¹³ OHZDP, 2017

¹⁴ Tourism, Eco-Tourism and Protected Areas, IUCN 1996.

¹⁵ Guidelines for community-based ecotourism development, WWF, 2001.

¹⁶ H. Butt, The third pole, 2023.

¹⁷ Nigar, Ecotourism for Sustainable Development in Gilgit Baltistan, 2018.

- Trainings for data collection and management;
- Technical and scientific trainings in hydrogeology and glaciology;
- Providing technical equipment;
- Integrated glaciological-hydrological monitoring model for the Upper Indus Basin;
- Qualitative drinking and irrigation water analysis plan;
- Phytopathology and zoo-prophylaxis laboratories;
- Trainings in phytopathology;
- Trainings in zoo-prophylaxis;
- Increasing awareness of farmers on sustainable agriculture and livestock practices;
- Capacity building and awareness raising of authorities on climate change risks, preserving mountain ecosystem and natural resources management;
- Community mobilisation on climate change risks and responsible use of natural resources;
- Reliable data and scientific evidence to improve early-warning systems;
- Institutional and community awareness raising on ecotourism as a sustainable business and driver of development;
- Development of an ecotourism management system;
- Strengthening the ecotourism value chain;
- Training for youth to meet labour market demand in ecotourism.

Based on the identified needs and in line with the national strategies and policies, this project intends in the long term to contribute to the promotion of the sustainable development of mountainous regions of northern Pakistan. In terms of the Theory of Change, the project aims to have an impact in the medium term on the climate adaptation and resilience capacity of these regions.

As for the short-term, the initiative aims to generate this change by building capacity in applied research on glacier dynamics, as well as in monitoring and management of water resources, by promoting sustainable agro-pastoral practices as well as strengthening ecotourism. In this regard, the project will provide knowledge, technical equipment and technologies.

Considering the above, within the framework of the AICS Theory of Change, the project will contribute to the OUTCOME 3 (PROSPERITY) “Increased preservation of cultural and natural heritage; supported economic and job placement activities related to culture and sustainable and responsible tourism.” as well as to the OUTCOME 2 (PLANET) “Strengthened resilience and adaptation to climate-related hazards and natural disasters”.

The project fits into the Agenda 2030, contributing to the achievement of the following SDGs:

- SDG 11, Target 4: Strengthen efforts to protect and safeguard the world’s cultural and natural heritage.
- SDG 8, Target 9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.
- SDG 13, Target 2: Integrate climate change measures into national policies, strategies and planning.

II. STRATEGY

This project, jointly identified with the federal and provincial authorities, aims to increase the climate adaptation of Gilgit Baltistan Province – which is one of the most fragile in the country from an ecosystem perspective – and the resilience of local communities, in order to contribute to the promotion of sustainable and inclusive development in mountainous regions, in line with the 2030 Development Agenda.

To effectively meet the challenges of climate change in the short and medium term, as well as the potential risks associated with unsustainable local practices in the fields of agriculture, livestock and forest management and irresponsible tourism, the institutional and community capacity to manage natural resources and to safeguard the ecosystems has to be increased.

Following is a comprehensive table on how the project intends to address the identified needs:

Macro-needs	Interventions
Enhancing the understanding of the water-agriculture nexus in GB, in relation to the effects of climate change	- Enhancement of existing glacial meteorological and climatic monitoring systems. - Elaborating evidence and scenarios on the water availability for drinking and agriculture purposes. - Upgrading of water analysis laboratory and technical assistance in the development of water quality surveys for irrigation use. - Provision of apps and platforms for systematic collection and storage of data from terrain and remote sensing. - Training at the institutional and technical level.
Improving the quality of agricultural and livestock products in GB	- Establishment of one phytopathology laboratory for the diagnosis and control of diseases on major local industrial crops. - Establishment of one zoo-prophylaxis laboratory for epidemiological control in animal health and hygiene of livestock production. - Implementation of multilevel scientific, technological and management training programs and development of monitoring programs. - Training at institutional and technical level.
Boosting eco-sustainable economic growth at the local level	- Establishment/rehabilitation/improvement of ecotourism facilities/services - Promote community-based ecotourism services - Capacity building and increasing awareness of ecotourism to institutions, communities and the private sector.

The project fits within the framework of the Government of Pakistan's policies and strategies to promote climate adaptation and resilience, to protect the environment and ecosystems: it contributes to the implementation of the *National Climate Resilience and Adaptation Plan 2023-2030 (NAP)*, *Living Indus* (2022) which proposes policy development for the sustainable management of the Indus Basin and the recovery of ecosystems, the *National Pakistan Climate Change Policy (NCCP) 2021*, and the *National Water Policy 2018*. The project is also coherent to the priorities of EU Multiannual Indicative Framework 2021-2027 and with the Team Europe Initiative (TEI) priority “Green Inclusive Growth”.

Aligned with the priorities of the *National Climate Resilience and Adaptation Plan 2023-2030 (NAP)* and of the *Annual Plan 2023/2024*, the project:

- On one hand, focuses on the study of glacial dynamics and the quantitative and qualitative availability of water resources affected by climate change to deepen the water, agriculture and livestock nexus in order to promote the sustainable management of natural resources and the adoption of sustainable agricultural and livestock practices.
- On the other hand, it aims to enhance natural heritage and mountain ecosystems through the promotion of sustainable tourism, as per the sectors identified as strategic in the NAP and in the government's Annual Plan 2023-24. This is key for the conservation of natural heritage and the creation of new job opportunities for local communities, and thus as a driver of sustainable and inclusive economic development.

More specifically, the project will include four pillars, which respectively strive upon:

- Improving the management of water resources, the landscape and the environmental risks through monitoring activities, data collection and processing of ground-based data. This shall be undertaken according to the World Meteorological Organization (WMO) *Assurance and the Quality Control (QA/QC)* protocols, combined with remote sensing/satellite data. There shall also be sharing of products and results with local counterparts (as local universities and EPA-GB, DMA-GB, and the local universities, i.e. Karakorum International University (KIU) and University of Baltistan (UOB) and with international agencies and programs such as WMO and the *Global Earth Observation System of Systems (GEOSS)*.
- Enhancing the research on qualitative management of agriculture and livestock, with particular attention to its interaction with the wildlife dwelling in the protected areas and forest resources in the biodiversity hot spots.
- Implementing sustainable and responsible tourism development policies, safeguarding the environmental, agricultural and cultural heritage and improving ecosystem services.
- Uplifting the capacity of local governments in sustainable ecosystem management.

Research activities and training will involve Karakorum International University (KIU) and the University of Baltistan (UOB); while for the socio-economic development aspects, the Baltistan Culture and Development Foundation (BCDF) and Aga Khan Cultural Support Programme (AKCSP) will potentially be involved. The research activities shall be aimed at improving the knowledge to respond to the impacts of climate change on water resources, hydrogeological risk, and agri-food production, as well as to carry out on-the-job coaching for technicians, university students and faculty members.

The scientific evidence produced and data collected by the stations will allow the Environmental Protection Agency (EPA) – GB and GBDMA to improve the early warning systems and mechanisms, with particular reference to water availability/shortage. The involvement of the Italian technical assistance will also enable synergies in the agricultural sector with the Programme *Economic Transformation Initiative (ETI)* – AID 10710, implemented by IFAD and co-funded by the Italian Government.

In particular, the improvement of water resource monitoring and land management (enhanced phytosanitary and zoo-prophylaxis analysis) will contribute to the identification and dissemination of sustainable agricultural and livestock practices, boost eco-tourism, strengthen natural heritage protection and reduce hydrogeological risk.

For the importance of ensuring advanced technologies and high-level standards of technical equipment for the implementation of project activities, the involvement of international and national companies whose technologies and products can meet the needs of the program shall be considered. The main areas of interest are climate and environmental monitoring, agricultural sector and sustainable development.

III. RESULTS AND PARTNERSHIPS

General Objective: Promoting sustainable development in the mountainous regions of northern Pakistan through enhanced adaptation capacity to climate change and improved conservation of ecosystems.

Indicators:

- Unemployment rate at the provincial level (SDG indicator 8.5.2 - Global indicator framework – A/RES/71/313 - E/CN.3/2023/2).
Baseline: 6.49% (SDG Status Report 2021 on 2018 data).
Target: 6.40%.
- Increase % in fruit marketing at the provincial level.
Baseline: 28,187.58 mt (source: Documentation & Statistics Cell, DOA, GB 2021).

Target: + 0,5%.

- N. of annual tourists visiting Gilgit Baltistan.

Baseline: 924.727,00 (Source: GB Tourism Dept. 2022).

Target: 1.200.000

Specific Objective: Improving water resource management, promoting sustainable agriculture and livestock practices and strengthening the ecotourism value chain.

Indicators:

- Number of best practices in water resource management as well as in agriculture and livestock value chain, identified during the project replicated in other Provincial districts.

Baseline: 0

Target: 3

- % of households with access to potable water in GB Province.

Baseline: 30%¹⁸

Target: 40%

- % of tourists reporting positive or very positive rating of ecotourism facilities/services developed/improved by the project.

Baseline: 0

Target: 60%

- N. of new job opportunities in the sustainable tourism sector created as a result of project activities.

Baseline: 0

Target: 100

A – Project Outcome, Indicators, Activities and Outputs

Outcome 1: Monitoring of glaciers and water resources is improved for drinking and agri-food purposes.

The improved capacity to monitor glaciers and water resources at the provincial level will be demonstrated by the data collected and the scenarios/forecasts produced about the availability of water resources from glaciers. Therefore, the first component consists of increasing the capacity of EPA-GB and GBDMA to monitor glaciers and water resources and to estimate water resource availability. The component shall comprise of knowledge transfer through training and capacity building activities, as well as the provision of technical equipment and technologies.

Outcome Indicators:

1.A Number of of *early warning* issued, based on the data produced by the meteorological stations installed

Baseline: 0

Target: 5

1.B Number of *staff from KIU, UOB and GB departments capacitated on data collection and management.*

Baseline: 0

Target: 150

1.C Number. of joint university-public body working groups established/started.

¹⁸ Census 2017

Baseline: 0

Target: 1

Resources Required to Achieve the outcome: Experts, monitoring and laboratory equipment, hardware e software.

Activity 1.1: Improving glaciological and hydrogeological research focusing key climate and environmental challenges through monitoring of glaciers and lakes

Starting from the data collected by EvK2CNR, UNIMI and from the glaciological inventory carried out as part of the *Glaciers & Students* project, the dynamics of GB glaciers in relation to climate change impacts, seasonal surface runoff trends, also related to hydrogeological risk phenomena, and relative availability of fresh downstream water will be investigated.

Output: Scenarios on the availability of water resources for civil and agribusiness use according to the medium- and long-term impacts of climate change are developed and provided to EPA and DMA.

Activity 1.2: Upgrading of the GIS information system for climate and water resources monitoring and data sharing.

The information system developed by the project *Glaciers & Students* will be updated with new data and survey results on water availability and demand in the downstream basins of the glacial areas of Gilgit-Baltistan and in particular in the project's pilot valleys.

Output: Best practice protocols are developed and provided to EPA and DMA to improve civilian and agribusiness management of water at the local level in the short and medium term.

Activity 1.3: Installation of meteorological and hydrometric stations to analyse glacial dynamics and surface runoff in relation to the weather parameters trends.

The activity consists of installing four new meteorological and hydrometric monitoring stations to study the hydrological behaviour of the project pilot basins through the combined analysis of data from ground stations and remote sensing. The data will also provide the scientific evidence to determine water availability and to develop local warning protocols by integrating medium-term weather forecasts, ground data and GIS data.

Output: 4 stations were installed and ground data was collected to calibrate remote sensing models and analyses.

Activity 1.4: Enhancement of the KIU-IMARC Glaciology Laboratory and related technical assistance.

On one hand the activity consists of purchasing and installing technical equipment and instruments for the glaciology laboratory of Karakorum International University-Integrated Mountains Areas Research Center (KIU-IMARC) and, on the other hand providing technical assistance to local technicians students and faculty members of the university.

Output: Increased quality research and laboratory's sustainability through the installation of advanced technical equipment training and capacity building of 80 persons among faculty members, researchers, students and technicians.

Activity 1.5: Capacity building on data collection and management, as well as on the Data Information System platform including men and women.

The activity consists of providing the relevant departments in Gilgit-Baltistan with the open-source data platform to enter, process, and validate data, as well as delivering the required training. At least two training courses for university students and technicians have been planned, one of which includes the transfer of knowledge on how to run the new system and one on data processing and analysis. Both these shall be implemented through lectures and practical “hands-on” and “on-the-job” activities. The data shared on the platform will have several applications so as to inform planning processes in agriculture, livestock, energy, and ecotourism development.

Output: Local university staff from KIU, UOB and GB departments (Dept. of Tourism, Dept. of Agriculture, Livestock and Fisheries, Dept. of Forest & Wildlife, EPA, DMA) are trained for better data collection and management.

Activity 1.6: Sharing useful data to improve risk assessment and early warning protocols with the local Civil Protection Department.

The data information system as well as scientific evidence produced will be shared with the Civil Protection Department in order to improve the early-warning system at the local level. Data and scientific evidence will inform the early-warning mechanism, improving its foresight capacity.

Output: Local authorities' capacities to establish appropriate early warning protocols are strengthened.

Outcome 2. Increased capacity for a sustainable management of agriculture and livestock value chain.

Through the upgradation of the water laboratory and the establishment of phytopathology and zoo-prophylaxis laboratories, the second component intends to provide scientific evidence to identify good practices for sustainable management of the agricultural and livestock value chain. This shall allow special focus on the use of water resources based on evidence concerning the quality of water resources available, the importance of livestock vaccination campaigns, and the quality, health and organoleptic aspects of agricultural production.

Outcome indicators:

- 2.A** N. of guided counselling in agricultural and livestock management informed by laboratories' analysis data (on health and organoleptic quality aspects)

Baseline: 0

Target: 5

- 2.B** Number of laboratories established/equipped and fully functional

Baseline: 0

Target: 3

1. water laboratory
1. phytopathology laboratory
1. zoo-prophylaxis laboratory

- 2.C** Number of technicians/operators/students (KIU, UOB) capacitated on running laboratories.

Baseline 0

Target:150 (50 for each laboratory)

Resources Required to Achieve the outcome: Experts, laboratories' equipment, hardware software, vaccines.

Activity 2.1: Strengthening the water laboratory and training of staff including males and females for improved management of freshwater resources in GB for drinking and agricultural purposes

Improvement of the quality analysis laboratory for water in Gilgit-Baltistan, installed 15 years ago by Ev-K2-CNR. This intervention includes the rehabilitation of the laboratory, provision of new equipment and field instruments, and activation of an extensive training program for local technicians/operators/university students. The training course will target at least 50 people. The activity will contribute to updating the inventory of drinking water sources and establishing appropriate World Meteorological Organization (WMO) Assurance and Quality Control (QA/QC) protocols for monitoring and management of water resources for drinking and agricultural purposes.

Output: 50 technicians/operators/students (KIU, UOB) trained and data platform enhanced for improved management by EPA for freshwater resources in GB for drinking and agricultural purposes.

Activity 2.2: Establishment of one phytopathology laboratory and training for men and women.

The activity consists of the establishment and start-up of a phytopathology laboratory for agricultural research, operated by Karakoram International University. The activity includes the installation of equipment and the implementation of an extensive training program for 50 local technicians/operators/students. This laboratory will carry out Phyto-pathological identification of agricultural products and thus it will benefit the local agricultural supply chain.

Output: 50 technicians/operators/students (KIU, UOB) trained and scientific evidence produced on agricultural practices.

Activity 2.3: Establishment of one zoo-prophylaxis laboratory and training for men and women staff.

Establishment of the first zoo-prophylaxis centre in Gilgit Baltistan, including installation of equipment and implementation of an extensive training program for 50 local technicians/operators/students. On the base of the expertise and past experiences of Ev-K2-CNR with the University of Turin within the SEED Project, the laboratory will contribute towards improving livestock management at the local level. Animal health, especially pertaining to sheep and goats, is closely related to human health and food quality: vaccination campaigns integrated into the local prevention system have been particularly effective and appreciated by local authorities and communities and should be updated and strengthened.

Output: 50 technicians/operators/students (KIU-UOB) trained and scientific evidence produced on livestock practices.

Activity 2.4: Promoting/supporting the use of laboratory services for male and female farmers.

To promote the use of laboratory services by farmers in the start-up phase, the project will agree upon the possible fees with the laboratory for the provision of services. In particular, farmers from cooperatives supported under the umbrella of the Economic Transformation Initiative (ETI) project will be eligible for these laboratories' services.

Output: 250 farmers benefit from improved capacity to access the market through the results of laboratories' analysis.

Activity 2.5: Supporting the Extension Service of the Department of Agriculture GB in disseminating laboratory analysis results and promoting the services provided by the laboratories among local farmers.

The activity consists of organizing and carrying out, in cooperation with the Extension Service of the Dept. of Agriculture GB, campaigns to disseminate the results of laboratory surveys and to promote its services by informing farmers about the benefits of laboratory-issued certifications in terms of access to markets for selling their products.

Output: Informed and sensitized farmers about the services provided by the laboratories.

Outcome 3: Criteria and best practices for sustainable tourism value chain management are introduced and adopted at the local level.

The third component aims to achieve the introduction and adoption of sustainable tourism criteria and best practices by the local stakeholders. This shall promote a community and a value chain approach to tourism by adopting a new methodology that shall combine the preservation of the natural environment and the sustainable use of natural and human resources. The indicators and good practices that shall be identified will have as benchmarks the criteria and indicators developed by the *Global Sustainable Tourism Council* (GSTC) to promote the alignment of the provincial tourism value chain to ISO standards, specifically "*ISO 21401, Tourism and related services -Sustainability management system for accommodation establishments.*" "*ISO 20611, Adventure tourism Good practices for sustainability*"; "*ISO 14001 and related standards for Environmental management*"; "*ISO 20121, Event sustainability management systems*"; "*ISO 18065, Tourism and related services -Tourist services for public use provided by Natural Protected Areas Authorities*". These criteria are aimed at defining how to manage facilities/services in the field of ecotourism. Based on the identified criteria and social and environmental impact studies and market analysis, interventions for start-up ecotourism facilities or improving existing facilities and services will be implemented to promote a model of ecotourism managed by local communities and that shall provide new employment opportunities for them and could be replicated to other areas. It is expected that the project will create 100 new economic and employment opportunities in the sustainable tourism value chain.

Resources Required to Achieve the outcome: Experts, companies, furniture.

Outcome indicators:

3.A Number of facilities/services in the tourism value chain identified as environmentally sustainable based on the criteria developed under the project

Baseline: 0

Target: 15

3.B Number of communities trained on ecotourism value chain

Baseline: 0

Target: 7 community groups

3.C Number of tourists who visit the eco-sustainable facilities/services and participate in the tourism activities developed by the project.

Baseline: 0

Target: 500

Activity 3.1: Technical assistance for the GB Dept. of Tourism's adoption of criteria and best practices for sustainable management of the tourism sector.

This activity consists of identifying criteria and best practices aimed at establishing a management system for an ecotourism area, including procedures to start up and run activities/services/accommodation facilities. The work of identifying and defining criteria will be carried out in collaboration with the Dept. of Tourism GB and communities. Specifically, the criteria and good practices identification will have as a benchmark criterion, and indicators, developed by the Global Sustainable Tourism Council (GSTC) to lay down the necessary groundwork for a framework to align the tourism value chain with ISO international standards, in particular, "*ISO 21401, Tourism and related services -Sustainability management system for accommodation establishments.*" "*ISO 20611, Adventure tourism Good practices for sustainability*"; "*ISO 14001 and related standards for Environmental management*"; "*ISO 20121, Event sustainability*

management systems"; "ISO 18065, Tourism and related services -Tourist services for public use provided by Natural Protected Areas Authorities". These criteria are aimed at defining how to manage facilities/services in ecotourism. The pilot ecotourism system will be linked not only to the reception activities but also to the quality agricultural and livestock production, land, water, forest and pasture management. The community-based ecotourism model that the project aims to develop introduces environmentally responsible practices into the tourism value chain, which will promote the conservation of ecosystems and cultural heritage as well as the active engagement of local communities. More specifically, the criteria model identified will be used to map existing eco-sustainable facilities/services in the area to identify good practices to be replicated.

Output: A Criteria model (GSTC/ISO benchmark) to identify good practices and increase the sustainability of the tourism supply chain is developed and adopted, as well as a mapping of existing eco-sustainable facilities/services in the area covered by the project activities is carried out.

Activity 3.2: Environmental and social impact assessment and market analysis for the establishment/rehabilitation/improvement of eco-sustainable tourism facilities/services.

An environmental and social impact assessment and market analysis, to inform the implementation/rehabilitation/improvement of environmentally sustainable accommodation/service facilities, will be carried out to inform the identification of the implementation/rehabilitation/improvement interventions. This will be conducted in light of the environmental and social impact on the local community as well as on the base of the market (estimating the facilities/services ability to intercept tourists and respond to market demand).

Output: Evidence and recommendations are produced through the environmental and sustainability impact assessment as well as the market analysis.

Activity 3.3: Establish/rehabilitation/improvement of ecotourism facilities/services in GB.

Based on the indications that will emerge from the impact assessment and market survey, the project will build/rehabilitate/improve ecotourism facilities and services. The facilities/services will meet the sustainable tourism criteria identified during the project and will serve as models in terms of sustainability and environmental impact, i.e., primarily for the use of renewable energy sources, waste recycling services, and energy efficiency. The activity includes the design, implementation and improvement of local tourism services, including the development of new tourist routes with picnic areas, maps, and waste collection bins. Management capacities will be developed, promoting community participation, the creation of public-private partnerships, and taking into consideration the entire tourism value chain.

Output: Ecotourism facilities/services are established/improved.

Activity 3.4: Information and outreach to mountain village communities to provide accommodation and tourism services in line with the sustainable tourism criteria developed during the project.

Information events and awareness campaigns for mountain village communities will be organized to promote the start-ups by families or networks of families providing hospitality business and tourism services, in line with the ecotourism criteria defined during the project. The activity aims to actively, and widely, involve local communities in the sustainable tourism supply chain.

Outout: At least 500 people are informed about the criteria of sustainable tourism and the possibility of offering reception and tourism services.

Activity 3.5: Training activities of local operators in the ecotourism value chain.

This activity includes the organization of training courses. At least two courses dedicated to sustainable tourist facilities/services management are planned. The courses will involve local communities (7 local GB communities) and local operators in the tourism sector (at least 5 operators) to improve the provision of tourism services at the local level. Training for local porters in English, courses on tourism mountains expeditions management and increasing awareness on responsible waste management will be implemented. Side awareness-raising activities for students on environmental protection are also planned.

Output: Local communities and tour operators are trained in order to increase the quality of local tourism services.

Outcome 4: Local authorities and communities' capacities to implement policies and practices for sustainable management of mountain ecosystems are strengthened.

This result will be achieved through institutional capacity-building activities and the sharing of project data and results with partners, institutions, local communities and the private sector. Sharing best practices and multi-level stakeholder involvement will enable effective knowledge and technology transfer and will ensure the sustainability of activities over time.

Outcome indicators:

4.A N. of best practices/action plans/sustainable local development plans, adopted by relevant departments (EPA, GB-DMA; Dept. of Planning, Dept. of Tourism, Dept. of Agriculture, Livestock and Fisheries. Dept. Forest & Wildlife).

Baseline: 0

Target: 5

4.B N. of people from local communities involved/mobilized and aware of ecotourism, land preservation and climate change risks.

Baseline: 0

Target: 500

4.C Number of people reached through information and communication materials.

Baseline: 0

Target: 1000

4.D N. of private sector actors informed on sustainable tourism and involved in the identification of best management practices for mountain ecosystems.

Baseline: 0

Target: 200

Resources Required to Achieve the outcome: Experts, Printing companies, communication and visibility materials.

Activity 4.1: Gender-inclusive training and capacity building of government officials on policies and best practices for sustainable management of mountain areas.

Based on the collaboration with Italian and local universities (KIU, UOB), the training component, which will mainly involve GB Government Departments (at least 5) and protected area management authorities (at least 2), is one of the main pillars of the initiative. More specifically, the training programs will focus on the following topics:

- Natural resources management in a protected area.
- Sustainable development models.
- Development and implementation of local policies for the promotion of community-based ecotourism.

Output: Institutional representatives and policy-makers from at least 5 provincial departments (EPA, GB-DMA; Dept. of Tourism, Dept. of Agriculture, Livestock and Fisheries. Dept. of Forest & Wildlife) and 2 protected area management authorities (Central Karakorum National Park and Deosai National Park) are trained in sustainable mountain ecosystem management.

Activity 4.2: Communication and awareness activities in national and international best practices on ecotourism, environment conservation and climate change-related risks for men and women.

Communication and dissemination of project results, information and knowledge about the good practices identified during the initiatives are essential to maximize the involvement of communities and stakeholders and to increase awareness of local and federal authorities as well as of international actors. The activity involves the organization of information and awareness-raising events, seminars, conferences, and festivals at the community, institutional and international levels.

Output: Around 1000 people, including local communities, institutions and stakeholders, are informed on ecotourism, environment conservation and climate change-related risks.

Activity 4.3: Production of information and communication materials.

The activity consists of the production of communication materials to support the dissemination activities of best practices and project results. It is planned to produce printed information materials (brochures, summary reports, publications) and digital materials on websites and social networks.

Output: Project beneficiaries are reached out by the distribution of communication materials, and informed about the project's results and good practices.

B – Potential Proposed Partnerships

The project will be entrusted to UNDP Pakistan, which will be responsible for the coordination of activities, maintaining relations with AICS, facilitating institutional relations at the local level, contributing to the dissemination of results, and ensuring adequate monitoring of expenditures and activities carried out to the enlisted goals and expected results. In the past, AICS Islamabad has already entrusted two projects to UNDP Pakistan in the same field: the grant project *Glaciers and Students* AID 012359 for a total amount of 1.100.000,00 EUR, and the grant project *Central Karakorum National Park (CKNP)* AID 010873, for a total amount of 2.000.000,00 EUR.

Partners:

- **Government of Gilgit Baltistan.** The specific bodies mainly involved in the implementation phase will be as follows:
 - **Department of Agriculture, Wildlife and Fisheries**, which has specifically supported the project and is responsible for ecosystem conservation in the Region.
 - **Environment Protection Authority (EPA)-GB** is in charge of all activities related to environmental protection, both at the policy-institutional level and at the operational and research level.
 - **Disaster Management Authority (DMA) - GB** is the provincial apex body for managing the risks associated with natural hazards in the region.
 - **The Pakistan Meteorological Department** is responsible for providing the overall meteorological service throughout Pakistan. Pakistan Meteorological Department has the mandate to investigate the factors responsible for global warming and climate change and its impact assessment. It is also involved with adaptation strategies in various sectors of human activities and for numerous public activities and projects that require weather information.

- **Karakoram International University (KIU).** The KIU was established in 2002 by a charter from the Federal Government. KIU's mission is to promote human development at all stages of life; through growth, evaluation, synthesis, dissemination and application of knowledge, and provide a service that values sustainable, humanitarian, and economic development of the environment. Through the *SEED* and *Glaciers and Students* projects the KIU received substantial support in several fields, such as infrastructure development, furniture equipment, including the installation of a Water Laboratory, scientific, such as the establishment of the Glaciology Centre and the Centre for Applied Mountain Studies (IMARC – Integrated Mountain Area Research Centre) and educational. Thus, KIU is well acquainted with dealing with Italian partners, since it participated in joint monitoring and assessment activities as well as in exchange programmes with Italian universities.
- **University of Baltistan (UoB).** The UoB, Skardu was established on August 25, 2017, under the “University of Baltistan Order 2016” as a federal public-sector university. The University is open to all persons of either gender and of whatever religion, race, creed, class, colour, or domicile. Earlier, as a higher education institution, the university started functioning as a sub campus of Karakoram International University in 2011. The university plays a pivotal role in the socio-economic and educational development of the region and nation through robust and contextually relevant programs.
- The above-mentioned partnerships have already been operative in the following projects funded by the Italian Government: *SEED* under the *Pakistan-Italian Debt for Development Swap Agreement (PIDSA)* AID 8942, the grant project *CKNP* (UNDP) AID 010873, and recently the grant project *Glaciers and Students* (UNDP) AID 12359.

C – Risks and Assumptions

The project has been carefully planned on the identified needs for knowledge and capacities keeping in view the current situation in the project area. It is assumed that the local mountain communities in Gilgit-Baltistan, particularly women and marginalized people, depend heavily on natural resources e.g. water, land and livestock, for their livelihood, and are more vulnerable to natural hazards originating from mountains and glaciers in the Karakoram region. Since these communities are closer to major glacier bodies, their vulnerability is even increased. It is assumed that the project findings will fill the gap of knowledge and data on climatic and glacial aspects in the Gilgit-Baltistan region and that the staff of authorities of the relevant government department in the GB region (e.g. GB Met Department, GB Disaster Management Authorities) will be able to own the project outputs in their best interest and put into practice for the benefit of the local marginalized communities. It is also assumed that the target high-altitude area, located in glaciers, is accessible for activities by national and international experts.

There are however certain risks that the project needs to take account of. The high-altitude range in Karakoram, Hindu-Kush and Himalayan regions, as the record shows, may become inaccessible on certain occasions because of bad weather conditions. The prolonged winter season and the occurrence of heavy snowfall may also shorten the period available for the implementation of project activities. There is also a risk that, the Gilgit- Baltistan region due to its undecided constitutional status and presence of a heavy network of security agencies, may pose restrictions on the entry and movement of foreign experts.

In the face of these risks, the project teams will maintain a close liaison with government authorities (including the District Administration, Met Department, and Disaster Management Authorities) to get regular forecasts on weather conditions as well as local socio-political conditions.

The project partners and implementation teams will maintain close consultation with security agencies to move things transparently. The project will plan to engage international experts to establish the field network of observation stations and use local personnel to collect data at periodic intervals. Intensive field

operations will be undertaken in favourable weather conditions to take maximum advantage and to lower the impact of bad weather conditions.

Detailed risk mitigation analysis in the form of a Risk Register is attached as an annex.

D – Stakeholder Engagement.

The project has been jointly elaborated with the local counterparts and based on consultations with stakeholders and beneficiaries. This ensures the ownership of local authorities and communities. At the launch of the project, stakeholders will be invited for an inception workshop to discuss proposed interventions in detail. The sustainability of the interventions will depend on the engagement of local authorities, universities (KIU and UOB) and communities during the implementation phase. Capacity-building activities and training will increase the ownership of local stakeholders and the overall sustainability of the project.

The direct beneficiaries of the project will be estimated at 1400 individuals as follows:

- The Government of Gilgit-Baltistan, more specifically:
 - o Environment Protection Agency (EPA) - GB will benefit from monitoring data and research results to supplement its database and strengthen its capacity to provide timely information, forecasts/alerts to other departments.
 - o Disaster Management Authority (DMA) – GB will be the main beneficiary of information generated on glacier dynamics and on data to inform early warning alerts of possible and consequent hydrogeological hazards.
 - o Officials and staff from the Dept. of Planning, Dept. of Tourism, Dept. of Agriculture, Livestock and Fisheries and Dept. of Forest & Wildlife, GB Meteorology Department, Irrigation department;
 - o Staff of National Parks and Protected Areas (Central Karakorum National Park and Deosai National Park).
- At the community level, about 500 people from the 7 communities settled in the project intervention areas will be directly involved. Women and persons with disabilities are particularly vulnerable to mountain hazards due to their mobility status, lack of access to resources and information on hazards, and capabilities to cope with natural disasters.
- 200 representatives from the private sector will also be reached by the information and awareness-raising activities.
- Faculty members and around 200 students from Karakoram International University and the University of Baltistan will benefit from the training programs and will be able to continue after the end of the project monitoring, analysis and research activities.

The identification of the above-mentioned direct beneficiaries shall be conducted in detail following rigorous consultation activities and focus group meetings with authorities, universities, and local community representatives who will provide lists of people to be involved.

Indirect beneficiaries: The communities in the rural mountain villages and the valleys of Gilgit Baltistan (all 10 districts) for a total of 200 communities will be potentially reached indirectly by the project activities. The overall number of individuals that shall be indirectly benefitting from the project will be more than 800,000. The timely information from relevant agencies and the adequate planning for risk management will reduce the risk to lives, property and infrastructure in the region.

E – South-South and Triangular Cooperation (SSC/TrC)

N/A

Digital solutions

Advanced technology, both hardware and software will be applied to the project activities. In particular, the project will upgrade the GIS and remote sensing system that will allow an improved capacity of local authorities to map, glaciers and glacial lakes at risk of GLOF. In addition, the project will introduce an open-source data information system to enter, process, and validate data on glacier dynamics and water resource availability. The data shared on the platform will have several applications including to inform planning processes in agriculture, livestock, energy, and ecotourism development. The results of the project will be shared through digital channels with the support of websites and social networks in order to reach a wider audience.

F – Knowledge

The proposed project intends to contribute to climate adaptation and resilience and safeguarding the mountain ecosystem by generating and disseminating knowledge and best practices in glacier and climate monitoring and related applications for environmental risk assessment, as well as knowledge and best practices in sustainable agriculture, livestock and ecotourism.

Knowledge transfer through training and capacity-building activities addressed to both government departments and local communities to be engaged in the implementation of effective strategies to cope with climate change will represent the pivotal component of the project. In particular, capacity building of women will be carried out by adopting a focused approach since women are key agents of change to both mitigation and adaptation.

In addition, the project shall provide online platforms for sharing knowledge and research to address decision-making and management issues, using wide-ranging consultations to find solutions to climate change-related problems.

Communication activities shall be generated to maximize the availability and visibility of knowledge and lessons learnt. This will effectively ensure the universal accessibility of content as far as possible, in line with the AICS Guidelines on Communication.

A communication strategy will be jointly developed in collaboration with AICS to inform beneficiaries, local stakeholders, donor communities and international organizations during the implementation phase.

In this regard, the initiative intends to focus on various communication channels including, public events, websites and the production of accessible dissemination materials about the project's objectives and results. The project includes knowledge transfer through scientific publications to be shared at the academic level and presented to institutional and operational partners. It has been planned to organize technical seminars to further inform and share the project results with local stakeholders.

In addition to the institutional website of AICS and AICS-Islamabad, the website of UNDP and potential stakeholders shall be used to disseminate information (EVK2CNR and EPA).

Both the AICS and the Republic of Italy logos will be displayed on all communication and visibility materials concerning the project and produced with Italian funds, as well as on all goods purchased for the implementation of the project's activities.

G – Sustainability and Scaling Up

Overall sustainability: institutional commitment.

The overall institutional sustainability of the project lies in the coherence of the project outcomes and activities with national and local development policies, strategies, and plans, as well as in the interest and

need expressed by local and federal authorities. The Project Management Unit and the Project Board will ensure joint coordination of the project with the full involvement of local counterparts.

The project will be implemented in coordination with other long-term initiatives in the region, which will allow the continuation of the proposed activities beyond the implementation of this project. Prospects for success are based mainly upon the attention and focus that government authorities dedicate towards climate change, environmental monitoring and related impacts, as well as their commitment to institutionalizing related planning mechanisms. Thus, ensuring the sustainability of the monitoring and risk assessment activities promoted by the project.

In addition, by involving local universities, the project aims to strengthen scientific and technical capacity in the region and support the continuation and replication of the methodology by concerned organizations beyond the implementation phase.

Technical sustainability.

The technical assistance includes technology and knowledge transfer. Training and capacity-building activities aimed at strengthening both technical and management capacities are key elements to allow a proper continuation of the activities, even after the end of the project. More specifically, the increased capacity of the EPA GB, DMA GB, MET Department GB, Department of Agriculture GB, and Department of Tourism GB, will ensure the long-term sustainability of the interventions. From a technical point of view, technology transfer will include hardware, QA/QC protocols for the monitoring network and software/methodologies for data analysis, spatial information systems, web platforms and software to support data management and processing. The training component will ensure the knowledge transfer to properly run and execute the technology introduced, which represents however an update of a technology already integrated in the local context. The protocols developed during the project and the training delivered will increase support management of the activities in the long term. Finally, the adoption of the Community-based approach shall ensure ownership by the local communities.

Economic and financial sustainability.

Funds are allocated to aspects and technologies that are already integrated into the local context. It is also expected that the project will contribute to improving livelihoods and management of water resources by local institutions and communities, as well as provide data and scientific evidence to inform environmental risk analysis and increase the capacity to mitigate the impacts of climate change on communities. In parallel, the project intends to boost ecotourism as a driver of sustainable development, generating benefits for local communities, through the creation of economic and employment opportunities.

Environmental impact

The initiative aims to promote environmental protection and the conservation of mountain ecosystems through the implementation of best practices for the preservation of glaciers, natural resources and protected areas. The technologies introduced are environmentally friendly and aimed at increasing scientific knowledge for sustainable use and management of natural resources. In addition, the tourism facilities and services that will be built/rehabilitated/improved – based on the results of socio-environmental and market impact assessment that will be carried out during the project start-up phase – will comply with the international criteria in terms of sustainability, by adopting as a benchmark the criteria elaborated by the Global Sustainable Tourism Council (GSTC) as well as ISO international standards. Therefore, the overall environmental impacts resulting from the proposed activities are expected to be largely positive.

More specifically, research and monitoring activities on glaciers and water resources (outcome 1), as well as the start-up and strengthening of glaciological, water, phytopathology, and zooprophyllaxis laboratories (outcome 2) aim to develop good practices for the sustainable use of water resources, best practices in agriculture and livestock management, as well as a deeper understanding of climate change impacts to the environment in order to develop targeted adaptation strategies.

Gender impact.

Gender mainstreaming approach will be applied to the project. Specific attention will be given to the role of women in glaciological and climatological studies. Capacity-building programmes for students and faculty of universities will observe equal participation of women. Furthermore, the project will ensure equal involvement of women and men while designing orientation sessions, and scientific studies/methodologies hence reducing gender-based biases. In addition, women from local communities will be included in training activities for the management of accommodations under the component of ecotourism, also benefiting from the creation of new employment opportunities. It is expected that 35 women will be involved.

Persons with disabilities

The project will adopt the mainstreaming of the disability approach in order to promote the inclusion of persons with disabilities in development policies at the local level. Persons with disabilities will be included in the training activities and benefit from the activities for the creation of employment opportunities under the component of ecotourism. It is expected that 15 people with disabilities will be involved.

Impact on local development plans, sustainability and replicability of the project

The project, aimed at improving the monitoring and management of natural resources, is replicable and subject to potential scale-up, in line with the priorities contained in the *National Climate Resilience and Adaptation Plan 2023-2030 (NAP)*, in *Living Indus 2022*, which proposes policy development for the sustainable management of the Indus Basin and the recovery of neighbouring ecosystems, the *National Pakistan Climate Change Policy (NCCP) 2021*, and the *National Water Policy 2018*.

Project activities are focused on key areas to achieve the government's goal of increasing climate change mitigation and adaptation capacity. The project introduces an environmental monitoring system and fosters strategic partnerships at the national and international levels that will ensure the long-term sustainability of the action. Technologies, protocols and best practices will be replicable in other areas of interest and over time.

IV. PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

The project will involve expertise from Italian universities having previous experience in the Northern region of Pakistan, such as the University of Milan, University of Cagliari, University of Turin, Politecnico University of Milan, Ca' Foscari University of Venice and University of Brescia. The possibility of involving partners, with a proven consolidated experience and a well-established network of relationships with local institutions and communities, would facilitate the implementation of the activities. Engaging the Italian System represents fruitful value-addition to the project.

The project is strictly complementary to the grant project "Fostering job creation and climate change adaptation through cultural heritage and responsible tourism in KP" of 3 million euros in the formulation phase, and the ongoing soft loan Economic Transformation Initiatives (AID 010710). Through these projects, AICS Islamabad intends to provide comprehensive support to Pakistan for the implementation of the NAP,

based on priorities expressed by the federal and provincial authorities. Indeed, in concurrence with the NAP strategy to increase the climate resilience and adaptation of the country, the AICS projects aim to safeguard the natural and cultural environment and to create economic and employment opportunities by boosting sustainable agri-business practices and ecotourism models. Within this framework, project W4D will focus on advanced research on natural resources and the enhancement of natural heritage for better conservation of ecosystems and to boost sustainable agro-business practices and responsible natural tourism.

Project Management

The project will be operated under NGO-Execution where EVK2CNR has been selected as Implementing Partner which will be accountable and responsible for the implementation, monitoring, reporting of results and resources in accordance with NGO-Execution modality of UNDP. In accordance with NGO-Execution Modality, UNDP Pakistan will provide quality assurance and oversight role in accordance with UNDP Programme and Operations Policies and Procedure (POPP). The project will have a linear staff arrangement at UNDP CO i.e. Project Manager and Admin and Finance Associate. The project team will facilitate work planning, monitoring and programme technical backstopping to the implementing teams on quarterly basis through review and planning meetings, field visits and events. The project will work within the overall framework of UNDP Country Office for quality assurance, and strategic leadership for alignment to Country Programme Document.

A Project Board will also be constituted in accordance with the UNDP POPP guidance. The Board will provide oversight to the project through annual review of progress, risks, lessons learnt and alignment to the overall project goal. To ensure best value for money and just use of project financial resources, the UNDP usual annual processes of Spot Check and Annual Audit will be followed as guided by UNDP Harmonised Approach to Cash Transfer (HACT) Framework.

Partner Capacity Assessment Tool and subsequent Micro-Capacity Assessment (MCA) for EVK2CNR (Italy) have also been conducted with identification of relevant risks included in the Risk Register, in accordance with UNDP POPP guidelines. These risks will be monitored during implementation by UNDP through its assurance and oversight function.

It is also planned to establish a Joint Committee, composed by AICS as donor, UNDP, Ev-K2-CRN and local counterparts, including the Federal Ministry of Climate Change, which will gather annually, with the task of launching the approval process of the following tranches on the basis of the results achieved and validated by the Project Board.

A Project Board will steer, oversee, and monitor the execution of planned activities.

The project will be managed by adopting the Result Based Management approach (RBM) in line with outcome identified in the Theory of Change, highlighting lessons learnt and best practices. Monitoring activities will be carried out through outcome indicators, verification sources and field missions. AICS may at any point in time appoint an external expert for monitoring after informing UNDP. The final evaluation of the project will be jointly carried out with AICS, in full cooperation with the Pakistani authorities and with the possibility of contracting external provider/third party for evaluation services.

The activities and progress of the project will be evaluated on the basis of the periodic work plans in relation to the indicators that provide quantitative elements and will serve to measure the expected results.

V. RESULTS FRAMEWORK¹⁹

Intended Outcome as stated in the UNSDCF/Country [or Regional] Programme Results and Resource Framework: By 2027, people living in the Indus River Basin, particularly the most vulnerable, including women, girls, boys, persons with special needs and senior citizens, will have their lives positively impacted by improved water access and utilization, economic development, livelihoods, climate-resilient settlements, and prosperity.									
Outcome indicators as stated in the Country Programme [or Regional] Results and Resources Framework, including baseline and targets: Degree of integrated water resources management implementation. (SDG indicator 6.5.1) Baseline (2020): 56%, 2027): Up to 70%									
Applicable Output(s) from the UNDP Strategic Plan: SR IRFF output 4.1.1. Efficient and sustainable use of fresh marine and terrestrial ecosystems, including the Indus Basin, for resilient communities through interventions for improved health, livelihoods, green economy and clean energy									
Project title and Quantum Project Number: Water for Development (W4D): Support to mountain sustainable development and adaptation policies (01002665)									
EXPECTED OUTCOME	OUTCOME INDICATORS ²⁰	DATA SOURCE	BASELINE		DATA COLLECTION METHODS & RISKS				
			Value	Year	Year 1	Year 2	Year 3	FINAL	
Outcome 1 <i>Monitoring of glaciers and water resources is improved for drinking and agri-food purposes.</i>	1.1 <i>N. of early warning issued, based on the data produced by the meteorological stations installed</i>	<i>Laboratory reports, reports from institutions, scientific journals.</i>	0	2024	0	2	3	5	<i>Lack of cooperation by the local department staff in the implementation of the project activities.</i> <i>Extreme weather conditions, landslides, floods, etc.</i>
	1.2 <i>Number of staff from KIU, UOB and GB departments capacitated on data collection and management (males: 75 and females: 75)</i>	<i>Laboratory reports, reports from institutions, scientific journals.</i>	0	2024	50	50	50	150	<i>Security issues in GB</i>

¹⁹ UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

²⁰ It is recommended that projects use output indicators from the Strategic Plan IRFF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

EXPECTED OUTCOME	OUTCOME INDICATORS ²⁰	DATA SOURCE	BASELINE		DATA COLLECTION METHODS & RISKS				
			Value	Year	Year 1	Year 2	Year 3	FINAL	
	1.3 Number of joint university-public body working groups established/started	Rapports from institutions, laboratory and universities.	0	2024	0	0	1	1	
Outcome 2 Increased capacity for a sustainable management of agriculture and livestock value chain.	2.1 N. of guided counselling in agricultural and livestock management informed by laboratories' analysis data (on health and organoleptic quality aspects)	Laboratories' reports/bulletins	0	2024	0	2	3	5	
	2.2 Number of laboratories established/equipped and fully functional	Reports and records of institutions and research centres, monitoring missions, field missions.	0	2024	1	1	1	3	Lack of cooperation by the local department staff in the implementation of the project activities. Extreme weather conditions, landslides, floods, etc.
	2.3 Number of technicians/operators/students (KIU, UOB) capacitated on running laboratories. (males: 75 and females: 75)	Reports from Laboratories and institutions, project reports	0	2024	50	50	50	150	Security issues in GB
Outcome 3 Criteria and best practices for a sustainable tourism value	3.1 Number of facilities/services in the tourism value chain identified as environmentally sustainable based on the criteria developed under the project	Project's reports, reports from institutions	0	2024	0	0	15	15	Lack of cooperation by the local department staff in the implementation of the project activities.

EXPECTED OUTCOME	OUTCOME INDICATORS ²⁰	DATA SOURCE	BASELINE		DATA COLLECTION METHODS & RISKS				
			Value	Year	Year 1	Year 2	Year 3	FINAL	
chain management are introduced and adopted at the local level.	3.2 Number of community groups trained on ecotourism value chain	Project's reports, statistics at the provincial level	0	2024	3	3	1	7 community groups	Extreme weather conditions, landslides, floods, etc. Security issues in GB
	3.3 Number of tourists who visit the eco-sustainable facilities/services and participate in the tourism activities developed by the project. (Males: 350, Females: 150)	Project's reports, interviews and surveys, reports f institutions.	0	2024	0	100	400	500	
Outcome 4 Local authorities and communities' capacities to implement policies and practices for sustainable management of mountain ecosystems are strengthened	4.1 Number of best practices/action plans/sustainable local development plans, adopted by relevant departments (EPA, GB-DMA; Dept. of Planning, Dept. of Tourism, Dept. of Agriculture, Livestock and Fisheries. Dept. Forest & Wildlife).	Reports of institutions, project reports, scientific journals, newspapers	0	2024	0	0	5	5	Lack of cooperation by the local department staff in the implementation of the project activities. Security issues in GB
	4.2 Number of people from local communities involved/mobilized and aware of ecotourism, land preservation and climate change risks. (Males: 250, Females: 250)	Project reports, interviews and surveys	0	2024	100	200	200	500	
	4.3 Number of people reached through information and communication materials. (Males: 600, Females: 400)	Scientific journals, newspapers, Tourism centres, visibility	0	2024	300	300	400	1000	

EXPECTED OUTCOME	OUTCOME INDICATORS ²⁰	DATA SOURCE	BASELINE		DATA COLLECTION METHODS & RISKS				
			Value	Year	Year 1	Year 2	Year 3	FINAL	
		<i>materials of local institutions.</i>							
	<i>4.4 Number. of private sector actors informed on sustainable tourism and involved in the identification of best management practices for mountain ecosystems</i>	<i>Project reports, interviews and surveys.</i>	<i>0</i>	<i>2024</i>	<i>50</i>	<i>50</i>	<i>100</i>	<i>200</i>	

Note: The result framework has been aligned to meet the donor requirements, wherein the outputs are marked as outcomes while activities as outputs. While in **PPM** the result chain will be followed using same sequense in 3 steps i.e. Project-outputs-activities

VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans: *[Note: monitoring and evaluation plans should be adapted to project context, as needed]*

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.	AICS	
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.		
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.		
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Bi-Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.		
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	Annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.		
Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk log with mitigation measures, and any evaluation or review reports prepared over the period.	Annually, and at the end of the project (final report)	APRs and End of project report		

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	Annually	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.		

Evaluation Plan²¹

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNSDCF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
End of project evaluation	-----	---	1-4	February 2027	All levels of Government; CSOs; UNDP; Donor partners	20,000 EUR

²¹ Optional, if needed

VII. MULTI-YEAR WORK PLAN ²²²³

All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be identified, estimated and fully costed in the project budget under the relevant outcome(s). This includes activities that directly support the project, such as communication, human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. All services which are directly related to the project need to be disclosed transparently in the project document.

OUTCOMES	PLANNED ACTIVITIES	Planned Budget by Year			UNDP/NGO	PLANNED BUDGET		
		2024-25	2025-26	2026-27		Funding Source	Budget Description	Amount
Outcome 1: Monitoring of glaciers and water resources is improved for drinking and agri-food purposes. With 30% female participation in capacity-building interventions GEN 2	Activity 1.1: Enhancing glaciological and hydrogeological research focusing on key climate and environmental challenges through monitoring of glaciers and lakes.	€ 37,600	€ 62,200	€ 20,000	EVK2CNR	AICS		€ 119,800
	Activity 1.2: Upgrading GIS information system for climate and water resources monitoring and data dissemination	€ 23,800	€ 65,000	€ 30,600	EVK2CNR	AICS		€ 119,400
	Activity 1.3: Installation of meteorological and hydrometric stations to analyse glacial dynamics and surface runoff in relation to the weather parameters trends.	€ 40,800	€ 87,600	€ 24,480	EVK2CNR	AICS		€ 152,880
	Activity 1.4: Enhancement of the KIU-IMARC Glaciology Laboratory and related technical assistance	€ 27,200	€ 41,880	€ 15,296	EVK2CNR	AICS		€ 84,376

²² Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

²³ Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

OUTCOMES	PLANNED ACTIVITIES	Planned Budget by Year			UNDP/NGO	PLANNED BUDGET		
		2024-25	2025-26	2026-27		Funding Source	Budget Description	Amount
	Activity 1.5: Capacity building trainings on data collection and management, as well as on the Data Information System platform including men and women.	€ 27,880	€ 20,000	€ 20,000	EVK2CNR	AICS		€ 67,880
	Activity 1.6: Sharing useful data to improve risk assessment and early warning protocols with the local Civil Protection Department	€ 10,000	€ 13,000	€ 10,600	EVK2CNR	AICS		€ 33,600
	Sub-Total for Outcome 1							€ 577,936
Outcome 2: Increased capacity for a sustainable management of agriculture and livestock value chain. GEN 2	Activity 2.1: Strengthening the water laboratory and trainings of staff including males and females for improved management of freshwater resources in GB for drinking and agricultural purposes	€ 44,200	€ 34,000	€ 27,200	EVK2CNR	AICS		€ 105,400
	Activity 2.2: Establishment of one phytopathology laboratory and staff training for men and women staff	€ 55,751	€ 51,689	€ 27,200	EVK2CNR	AICS		€ 134,640
	Activity 2.3: Establishment of one zoo-prophylaxis laboratory and training for men and women staff	€ 47,600	€ 40,800	€ 30,600	EVK2CNR	AICS		€ 119,000
	Activity 2.4: Promoting/supporting the use of laboratory services by male and female farmers.	€ 15,600	€ 10,000	€ 10,000	EVK2CNR	AICS		€ 35,600

OUTCOMES	PLANNED ACTIVITIES	Planned Budget by Year			UNDP/NGO	PLANNED BUDGET		
		2024-25	2025-26	2026-27		Funding Source	Budget Description	Amount
	Activity 2.5: Supporting the Extension Service of the Dept. of Agriculture GB in disseminating laboratory analysis results and promoting the services provided by the laboratories among local farmers.	€ 15,000	€ 14,208	€ 14,200	EVK2CNR	AICS		€ 43,408
	Sub-Total for Outcome 2							€ 438,048
Outcome 3: Criteria and best practices for sustainable tourism value chain management are introduced and adopted at the local level. GEN 2	Activity 3.1: Technical assistance for the GB Dept. of Tourism's adoption of criteria and best practices for sustainable management of the tourism sector.	€ 37,160	€ 69,800	€ 30,600	EVK2CNR	AICS		€ 137,560
	Activity 3.2: Environmental and social impact assessment and market analysis for the establishment/rehabilitation/improvement of eco-sustainable tourism facilities/services.	€ 15,000	€ 30,000	€ 10,000	EVK2CNR	AICS		€ 55,000
	Activity 3.3: Establishment/rehabilitation/improvement of ecotourism facilities/services in GB.	€ 156,432	€ 220,475	€ 103,200	EVK2CNR	AICS	72100	€ 480,107
	Activity 3.4: Information and outreach to mountain village communities (gender inclusive) to provide accommodation and tourism services in line with the sustainable tourism criteria developed during the project.	€ 15,000	€ 20,000	€ 8,800	EVK2CNR	AICS		€ 43,800

OUTCOMES	PLANNED ACTIVITIES	Planned Budget by Year			UNDP/NGO	PLANNED BUDGET		
		2024-25	2025-26	2026-27		Funding Source	Budget Description	Amount
	Activity 3.5: Training activities of local operators in the ecotourism value chain for men women.	€ 40,000	€ 36,200	€ 17,880	EVK2CNR	AICS		€ 94,080
	Sub-Total for Outcome 3							€ 810,547
Outcome 4: Local authorities and communities' capacities to implement policies and practices for sustainable management of mountain ecosystems are strengthened. GEN 2	Activity 4.1: Gender-inclusive training and capacity building of government officials on policies and best practices for sustainable management of mountain areas.	€ 10,900	€ 20,337	€ 15,410	EVK2CNR	AICS		€ 46,647
	Activity 4.2: Communication and awareness activities in national and international best practices on ecotourism, environment conservation and climate change-related risks for men, women and children.	€ 4,000	€ 9,500	€ 8,000	UNDP	AICS		€ 21,500
	Activity 4.3: Production of information and communication materials.	€ 7,273.18	€ 10,000	€ 4,784.96	UNDP	AICS		€ 22,058.14
	Sub-Total for Outcome 4							€ 90,205.14
	Project Staff Cost (UNDP and NGO)	€ 244,033	€ 277,492.48	€ 245, 593.48	UNDP/EVK2CNR	AICS		€ 767,118.96
	External Evalutaions	€ 13,000	€ 8,795.93	€ 10,000	UNDP	AICS		€ 31,795.93
	Direct Project Costing Rent, Utilities, Travel, Office Support, Monitoring cost, Audits and Assurance	€ 10,194	€ 14,430	€ 10,000	UNDP	AICS		€ 34,624

OUTCOMES	PLANNED ACTIVITIES	Planned Budget by Year			UNDP/NGO	PLANNED BUDGET		
		2024-25	2025-26	2026-27		Funding Source	Budget Description	Amount
	General Management Support (8%)	€ 71,873.85	€ 92,592.59	€ 55,555.56	UNDP	AICS		€ 220,022
	Coordination Levy (1%)	€ 29,702.97	€ 0,00	€ 0,00	UNDP	AICS		€ 29,702.97
TOTAL								€ 3,000,000

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

The project will be implemented through NGO-Execution Modality, as described in the UNDP Programme and Operations Policies and Procedures (POPP). UNDP has selected EvK2CNR as Implementing Partner after following a thorough procedure as described under UNDP POPP for selection of an IP. EvK2CNR has prior experience in the target area on similar projects under the thematic-area of this project. UNDP Partner Capacity Assessment Tool and HACT Micro-Capacity Assessment was conducted and has identified Risk Rating as Low..

UNDP Pakistan will provide quality assurance and oversight role in accordance with UNDP Programme and Operations Policies and Procedure (POPP).

Project Board: The Project Board is the most senior, dedicated oversight body for a UNDP ‘Development Project’, which is defined in the PPM as an instrument where UNDP “Delivers outputs where UNDP has accountability for design, oversight and quality assurance of the entire project.” A carefully constituted Project Board will be responsible for making important management decisions by consensus to provide oversight on strategic matters, approve work plans and validate project progress. The Project Board decisions will be made in accordance to standards that shall ensure best value to money, fairness, integrity, transparency and effective competition. In case a consensus cannot be reached, final decision shall rest with Chairman of the Board who will be from UNDP. The board will meet at least once in a year and when required for taking important decisions. Representative of other stakeholders can be included in the Board as appropriate, as observers upon agreement of all members of the Project Board. Meetings of the Project Board are organized at least once a year, but more often as required.

Duties and Responsibilities

The two prominent, mandatory roles of the Project Board are as follows:

1) **High-level oversight of the project** (as explained in the “Provide Oversight” section of the PPM). This is the primary function of the Project Board. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, monitoring missions' reports, evaluations, risk logs, quality assessments, and the combined delivery report. The Project Board is the main body responsible for taking corrective actions as needed to ensure the project achieves the desired results. And its function includes oversight of annual (and as-needed) assessments of any major risks to the programme or project, and related decisions/agreements on any management actions or remedial measures to address them effectively.

The Project Board also carries the role of quality assurance of the project taking decisions informed by, among other inputs, the project quality assessment. In this role the Board is supported by the quality assurer, whose function is to assess the quality of the project against the corporate standard criteria. This function is performed by a UNDP programme or monitoring and evaluation officer to maintain independence from the project manager regardless of the project’s implementation modality. The Project Board reviews updates to the project risk log.

2) **Approval of key project execution decisions** (as explained in the “Manage Change” section of the PPM). The Project Board has an equally important, secondary role in approving certain adjustments above provided tolerance levels, including substantive programmatic revisions (major/minor amendments), budget revisions, requests for suspension or extension and other major changes (subject to additional funding partner/donor requirements).

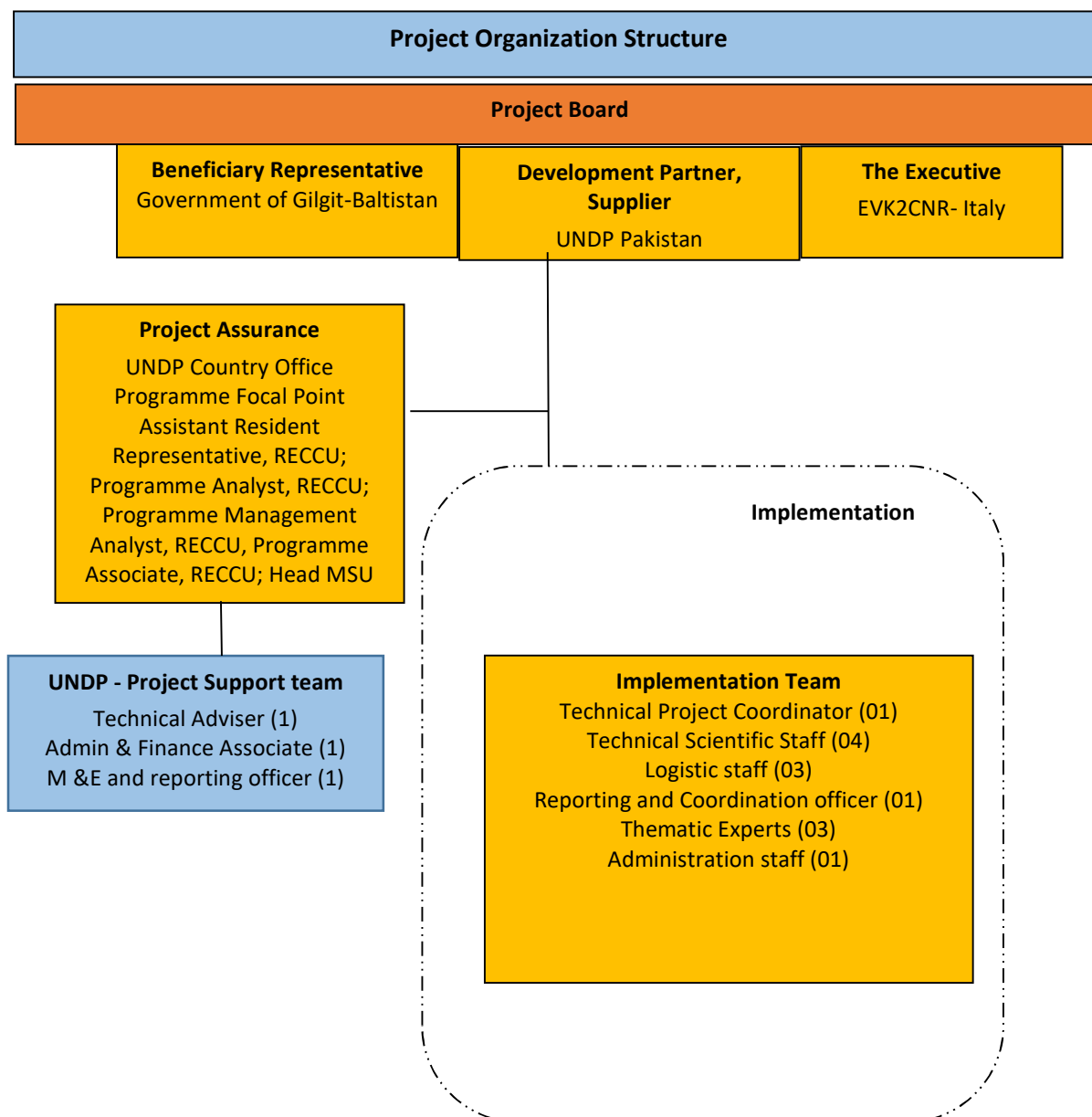
The Project Board is responsible for making management decisions by consensus when required, including the approval of project plans and revisions, and the project manager’s tolerances. The Project Board approves annual work plans and reviews updates to the project risk log.

In order to ensure UNDP's ultimate accountability, Project Board decisions shall be made in accordance with the Quality Standards for Programming that ensure management for development results, best value money, fairness, integrity, transparency and effective national and international competition. The Board will be guided by credible data, evidence, quality assurance and reporting to aid decision making. The project Board will also exercise adaptive management as and when required to respond to newly emerging project circumstances -both opportunities and threats for the project- that may involve adjustment to the approved workplan and/or approach.

Within the overall governance and management arrangements of the project, the role of the Project Board as regards these two key functions (*'High-level oversight of the project'* and *'Approval of key project execution decisions'*) is distinct from the roles of entities involved in the implementation of the project, namely Responsible Parties (if applicable), service providers and project staff.

The Planning and Development Department of Gilgit Baltistan will serve as focal department from Gilgit Baltistan's Government.

Project Governance Structure:



The Executive

The Executive role will be performed by EvK2CNR Italy, which is ultimately responsible for the project. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes. The Executive must ensure that the project gives value for money, ensuring a cost-conscious approach to the project, balancing the demands of beneficiary and supplier. The Executive is responsible for overall quality assurance of the project as described below. If the project warrants it, the Executive may delegate some responsibility for the project assurance functions.

Development partner:

UNDP Pakistan will act as Development Partner to the Project Board.

Beneficiary Representative: Government of Gilgit-Baltsitan will be the representative of beneficiary of the project

Project Assurance:

The Project Assurance role supports the Project Board by carrying out objective and independent project oversight and monitoring functions. The role ensures appropriate project management milestones are managed and completed. The project assurance will rest with the UNDP Resilience, Environment and Climate Change Unit and Management Support Unit (MSU). The Assurance function will involve commissioning independent evaluation, 3rd party financial spot checks and 3rd party financial audits as well as regular quality assurance on the results and financial resource reports submitted by the RP to UNDP in accordance with the agreed frequency identified in the Project Cooperation Agreement.

IX. LEGAL CONTEXT

The project document shall be the instrument envisaged and defined in the [Supplemental Provisions](#) to the Project Document, attached hereto and forming an integral part hereof, as “the Project Document”.

This project will be implemented by EvK2CNR (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

X. RISK MANAGEMENT

1. Consistent with the Article III of the SBAA [or the Supplemental Provisions to the Project Document], the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
 - a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - b) assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.
2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document and the Project Cooperation Agreement between UNDP and the Implementing Partner.
3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism, that the recipients of any amounts provided by UNDP hereunder do not appear on the United Nations Security Council Sanctions Consolidated Sanctions List, and that no UNDP funds received pursuant to the Project Document are used for money laundering activities. The United Nations Security Council Sanctions Consolidated Sanctions List can be accessed via <https://www.un.org/securitycouncil/content/un-sc-consolidated-list>.
4. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-

recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

(a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment. SH may occur in the workplace or in connection with work. While typically involving a pattern of conduct, SH may take the form of a single incident. In assessing the reasonableness of expectations or perceptions, the perspective of the person who is the target of the conduct shall be considered.

5. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will, and will require that such sub-parties will take all appropriate measures to:

- i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;
- ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4, have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and such sub-parties may use the training material available at UNDP;
- iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;
- iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and
- v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

6.Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).

7.The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

8.All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

9.UNDP is committed to the highest ethical standards and will not tolerate the diversion of the resources entrusted to it through Money Laundering or Terrorist Financing and will not partner with entities that tolerate the diversion of resources through Money Laundering or Terrorist Financing. To that effect, the Implementing Partner represents and warrants that it has not, and it shall not, at any time in the implementation of the Project engage in Terrorism Financing or Money Laundering. The Implementing Partner shall communicate the restriction of this paragraph to its and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Documents and shall take all reasonable measures to ensure that such persons do not engage in Terrorism Financing or Money Laundering.

10.The Implementing Partner shall immediately disclose to UNDP any actual, apparent, potential or attempted Terrorism Financing or Money Laundering activity that it becomes aware of. The Implementing Partner shall fully cooperate with any investigation or review of Terrorism Financing or Money Laundering activity by UNDP.

11.The Implementing Partner acknowledges and agrees that Terrorism Financing or Money Laundering constitute financial irregularities and that if the Implementing Partner or any of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document engages in Terrorism Financing or Money Laundering activity that would constitute a material breach of this Project Document, which entitles UNDP to immediately terminate the Project without incurring any liability or penalty.

12.Furthermore, the Implementing Partner expressly acknowledges and agrees that, in the event that UNDP were to determine through an investigation or otherwise that Terrorism Financing or Money Laundering occurred, UNDP shall have, in addition to its right to immediately terminate the Project, the rights to:

- i. apply and enforce the relevant sanctions in accordance with UNDP internal regulations, rules, procedures, practices, policies and guidelines, including referral of the matter to national authorities when appropriate; and
- ii. recover all losses, financial or otherwise, suffered by UNDP in connection with such Terrorism Financing or Money Laundering activity.

13.For the purpose of this Project Document the following terms shall have the definition ascribed to the below:

- i. "Money Laundering" is generally considered as concealment of the origins of money obtained illegally, typically by passing it through a complex sequence of financial or commercial transactions. ML usually involves three stages: (i) introducing the proceeds of crime into the financial system (placement); (ii) transactions to convert or transfer the funds to other locations or financial institutions (layering); and (iii) reintroducing the funds into the legitimate economy as "clean" money and investing it in various assets or business ventures (reintegration) appearing to have

been legally obtained. The FATF recommends that ML be criminalized by every country on the basis of article 3(1)(b) and (c) of the Vienna Convention and article 6(1) of the Palermo Convention.

- ii. “Terrorist Financing” means providing support to individuals or entities that appear on the United Nations Security Council Consolidated Sanctions List accessible at <https://www.un.org/securitycouncil/content/un-sc-consolidated-list>.

14. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using the UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption, anti-fraud and anti money laundering and countering the financing of terrorism policies are in place and enforced for all funding received from or through UNDP.

15. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices (b) UNDP Anti-Money Laundering and Countering the Financing of Terrorism Policy; and (c) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

16. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP programmes and projects in accordance with UNDP regulations, rules, policies and procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner’s (and its consultants’, responsible parties’, subcontractors’ and sub-recipients’) premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

17. The Implementing Partner will promptly inform UNDP in case of any incidence of inappropriate use of funds, or credible allegation of fraud, corruption or other financial irregularity with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption or other financial irregularity, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP’s Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

18. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud, corruption or other financial irregularity, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term “Project Document” as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with the Implementing Partner, responsible parties, subcontractors and sub-recipients.

19. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.
20. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
21. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled “Risk Management Standard Clauses” are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled “Risk Management” are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XI. ANNEXES

1. Project Quality Assurance Report (Design and Appraisal)

2. Social and Environmental Screening including additional Social and Environmental Assessments or Management Plans as relevant.

3. Risk Analysis

4. Capacity Assessment: Results of capacity assessments of Implementing Partner (including HACT Micro Assessment) Annex 4a (PCAT EvK2CNR), Annex 4b (HACT Report EvK2CNR Italy)

5. Supplemental Provisions to SBAA

6. On-Granting Provisions Applicable to the Implementing Partner²⁴.

²⁴ Applicable for non-UNDP Implementing Partner as Grant Making Institution facilitating on-granting.

PROJECT QA ASSESSMENT - DESIGN AND APPRAISAL

OVERALL PROJECT

DECISION

- ## RATING CRITERIA

For all questions, select the option that best reflects the project

STRATEGIC

Page 43

2. Is the project aligned with the UNDP Strategic Plan? 3: The project responds to at least one of the development settings as specified in the Strategic Plan^[1] and adapts at least one Signature Solution^[2]. The project's RRF includes all the relevant SP output indicators. <i>(all must be true)</i> 2: The project responds to at least one of the development settings as specified in the Strategic Plan⁴. The project's RRF includes at least one SP output indicator, if relevant. <i>(both must be true)</i> 1: The project responds to a partner's identified need, but this need falls outside of the UNDP Strategic Plan. Also select this option if none of the relevant SP indicators are included in the RRF. The project outputs are in line with UNDP Strategic Plan (2022-2025) Development setting/Direction of Change #3 "Building Resilience" and Signature Solution # 3 and 4(Resilience and Environment), The project will contribute to SP (2022-2025), Output 2.4.1: Gender-responsive legal and regulatory frameworks, policies and institutions strengthened, and solutions adopted, to address conservation, sustainable use and equitable benefit sharing of natural resources , in line with international conventions and national legislation and output indicator 2.4.1.1 Number of additional countries with gender-responsive measures in place for conservation, sustainable use, and equitable access to and benefit sharing of natural resources, biodiversity and ecosystems.	2 Evidence Prodoc (pg. 01, 24-25)	
3. Is the project linked to the programme outputs? (i.e., UNDAF Results Group Workplan/CPD, RPD or Strategic Plan IRRF for global projects/strategic interventions not part of a programme) Under the UNDP Country Programme Document (2023-2027), the project will contribute to Outcome 3: By 2027, people living in the Indus River Basin, particularly the most vulnerable, including women, girls, boys, persons with special needs and senior citizens, will have their lives positively impacted by improved water access and utilization, economic development, livelihoods, climate-resilient settlements, and prosperity and more specifically its Output 3.2. Efficient and sustainable use of fresh marine and terrestrial ecosystems, including the Indus Basin, for resilient communities through interventions for improved health, livelihoods, green economy and clean energy ". The project responds to development settings (Outcome 3) and signature solution 1, 3, 4, and 6 of SP.	Yes Evidence Prodoc: pg 1	
RELEVANT		
4. Does the project target groups left furthest behind? 3: The target groups are clearly specified, prioritising discriminated and marginalized groups left furthest behind, identified through a rigorous process based on evidence. 2: The target groups are clearly specified, prioritizing groups left furthest behind. 1: The target groups are not clearly specified. <i>*Note: Management Action must be taken for a score of 1. Projects that build institutional capacity should still identify targeted groups to justify support</i>	2	

The project outcomes and outputs will benefit mountain communities living in fragile valley slopes, also those dwelling in the valley bottom and depending upon agriculture, and in general the farmers in further downstream areas. The findings will help decision makers in making informed decisions at regional and national level (including the staff of met department, disaster management authorities, agriculture department). The project has a clearly defined geographic focus on Glaciers in the Gilgit-Baltistan region (including the valleys of Gilgit, Hunza, Nagar, Skardu, Shigar, Khaplu). Direct beneficiaries of the knowledge created and capacity building activities will be the Government of Gilgit-Baltistan (the EPA, GB Met Department, GB DMA, GB P&D, KIU) and Government of Pakistan (Pakistan Met Department) including their other relevant departments e.g. the water management department, agriculture department. Indirect beneficiaries include WMO and the global scientific community working on glaciology, climate change and meteorology.(Prodoc: pg 24) For further details of direct and indirect beneficiaries and their engagement refer to Section D of the project document.	Evidence Prodoc (pg. 1 and 24)	
5. Have knowledge, good practices, and past lessons learned of UNDP and others informed the project design? • 3: Knowledge and lessons learned backed by credible evidence from sources such as evaluation, corporate policies/strategies, and/or monitoring have been explicitly used, with appropriate referencing, to justify the approach used by the project. • 2: The project design mentions knowledge and lessons learned backed by evidence/sources, but have not been used to justify the approach selected. • 1: There is little or no mention of knowledge and lessons learned informing the project design. Any references made are anecdotal and not backed by evidence. *Note: Management Action or strong management justification must be given for a score of 1 The project is a logical sequence to the previous ongoing project of “Glacier and Students” implemented in the same geographical location of GB region in the designated mountain protected area of Central Karakoram National Park, undertaken by experts from Italian University of Milan and the EVK2-CNR Association. Similarly, previous network of high altitude meteorology observatories, currently being maintained jointly by the Pakistan Met Department and the EVK2-CNR Association will be upgraded and expanded. The current project has been planned in close consultation with all these experts and stakeholders involved in previous work. In addition, consultations have been undertaken with Karakoram International University, University of Baltistan, and other relevant departments. (Prodoc: pg 24)	2	Evidence Prodoc (pg. 21-23)
6. Does UNDP have a clear advantage to engage in the role envisioned by the project vis-à-vis national/regional/global partners and other actors? • 3: An analysis has been conducted on the role of other partners in the area where the project intends to work, and credible evidence supports the proposed engagement of UNDP and partners through the project, including identification of potential funding partners. It is clear how results achieved by partners will complement the project’s intended results and a communication strategy is in place to communicate results and raise visibility vis-à-vis key partners. Options for south-south and triangular cooperation have been considered, as appropriate. <i>(all must be true)</i> • 2: Some analysis has been conducted on the role of other partners in the area where the project intends to work, and relatively limited evidence supports the proposed engagement of and division of labour between UNDP and partners through the project, with unclear funding and communications strategies or plans. • 1: No clear analysis has been conducted on the role of other partners in the area that the project intends to work. There is risk that the project overlaps and/or does not coordinate with partners’ interventions in this area. Options for south-south and triangular cooperation have not been considered, despite its potential relevance.	2	Evidence Potential proposed partnerships Prodoc (pg. 20)

*Note: Management Action or strong management justification must be given for a score of 1

Role of other partners from government, private and civil society has been considered, for reference please see Section B of the Project Document. The UNDP will play role to develop partnership platform to engage local, regional, national and international actors for the planned tasks. With engagement of Italian universities and their experts to local universities in GB area and the relevant departments, the UNDP will inculcate mutual sharing and exchange of knowledge and resources and building capacities. UNDP will thus strengthen its role as a change leader and trusted partner in development at country level also.

It is clear how results achieved by partners will complement the project's intended results and a communication strategy is in place to communicate results and raise visibility vis-à-vis key partners.

PRINCIPLED

7. Does the project apply a human rights-based approach?

- **3:** The project is guided by human rights and incorporates the principles of accountability, meaningful participation, and non-discrimination in the project's strategy. The project upholds the relevant international and national laws and standards. Any potential adverse impacts on enjoyment of human rights were rigorously identified and assessed as relevant, with appropriate mitigation and management measures incorporated into project design and budget. (*all must be true*)
- **2:** The project is guided by human rights by prioritizing accountability, meaningful participation and non-discrimination. Potential adverse impacts on enjoyment of human rights were identified and assessed as relevant, and appropriate mitigation and management measures incorporated into the project design and budget. (*both must be true*)
- **1:** No evidence that the project is guided by human rights. Limited or no evidence that potential adverse impacts on enjoyment of human rights were considered.

*Note: Management action or strong management justification must be given for a score of 1

All human beings, irrespective of their geographical living area, have the basic right to live in and enjoy a safe, clean and sustainable environment. Communities living in the high altitude zone of Gilgit-Baltistan are living in fragile environmental conditions laden with risks e.g. GLOFs, landslides, droughts and loss of biological resources. People living in the downstream area are facing risk of floods and droughts because of glacier melting due to global warming. The planned project recognizes the rights of all these communities, and without any discrimination to community groups or geographical area, intends to target glacier at high risk, and thus making efforts to safe-guard the basic right of upstream and downstream communities to live a safe and sustainable environment free of risks and access to information on potential risks factors. (SESP)

8. Does the project use gender analysis in the project design?

- **3:** A participatory gender analysis has been conducted and results from this gender analysis inform the development challenge, strategy and expected results sections of the project document. Outputs and indicators of the results framework include explicit references to gender equality, and specific indicators measure and monitor results to ensure women are fully benefitting from the project. (*all must be true*)
- **2:** A basic gender analysis has been carried out and results from this analysis are scattered (i.e., fragmented and not consistent) across the development challenge and strategy sections of the project document. The results framework may include some

2

Evidence

SESP (pg. 55
prodoc)

2

Evidence

Prodoc (pg.
22)

gender sensitive outputs and/or activities but gender inequalities are not consistently integrated across each output. <i>(all must be true)</i> 1: The project design may or may not mention information and/or data on the differential impact of the project's development situation on gender relations, women and men, but the gender inequalities have not been clearly identified and reflected in the project document. *Note: Management Action or strong management justification must be given for a score of 1 Management Action: Project will ensure to collect gender disaggregated data during mapping/survey exercises planned under output 1 of the project. Based on the gender sensitive data of communities including women, PWD etc. relevant recommendations to be provided to the provincial/regional government departments for policy implementation. Moreover, women's health and safety are also severely affected in the process and a majority of rural area residents are not fully aware of the extent of damages caused to women during these processes. Overall, the project will contribute towards improved health and better socio-economic conditions of women in rural areas.		
9. Did the project support the resilience and sustainability of societies and/or ecosystems? 3: Credible evidence that the project addresses sustainability and resilience dimensions of development challenges, which are integrated in the project strategy and design. The project reflects the interconnections between the social, economic and environmental dimensions of sustainable development. Relevant shocks, hazards and adverse social and environmental impacts have been identified and rigorously assessed with appropriate management and mitigation measures incorporated into project design and budget. <i>(all must be true)</i>. 2: The project design integrates sustainability and resilience dimensions of development challenges. Relevant shocks, hazards and adverse social and environmental impacts have been identified and assessed, and relevant management and mitigation measures incorporated into project design and budget. <i>(both must be true)</i> 1: Sustainability and resilience dimensions and impacts were not adequately considered. *Note: Management action or strong management justification must be given for a score of 1 The project design integrates sustainability and resilience dimensions of development challenges in the Social and Environmental screening procedure (SESP). Relevant shocks, hazards and adverse social and environmental impacts have been identified and assessed, and relevant management and mitigation measures incorporated into project design and budget	2	Evidence Annex 5 SESP (pg. 62-63)
10. Has the Social and Environmental Screening Procedure (SESP) been conducted to identify potential social and environmental impacts and risks? The SESP is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences and/or communication materials and information dissemination. [if yes, upload the completed checklist. If SESP is not required, provide the reason for the exemption in the evidence section.] Social and environmental screening procedure has been conducted for the project and has been annexed to the project document.	Yes (3)	(pg. prodoc 45-55)
MANAGEMENT & MONITORING		
11. Does the project have a strong results framework?	3	

• 3: The project's selection of outputs and activities are at an appropriate level. Outputs are accompanied by SMART, results-oriented indicators that measure the key expected development changes, each with credible data sources and populated baselines and targets, including gender sensitive, target group focused, sex-disaggregated indicators where appropriate. <i>(all must be true)</i> • 2: The project's selection of outputs and activities are at an appropriate level. Outputs are accompanied by SMART, results-oriented indicators, but baselines, targets and data sources may not yet be fully specified. Some use of target group focused, sex-disaggregated indicators, as appropriate. <i>(all must be true)</i> • 1: The project's selection of outputs and activities are not at an appropriate level; outputs are not accompanied by SMART, results-oriented indicators that measure the expected change and have not been populated with baselines and targets; data sources are not specified, and/or no gender sensitive, sex-disaggregation of indicators. <i>(if any is true)</i> *Note: Management Action or strong management justification must be given for a score of 1 The project's selection of outputs and activities are at an appropriate level. Outputs are accompanied by SMART, results-oriented indicators with credible data sources and populated baselines and targets, including gender sensitive, target group focused, sex-disaggregated indicators. For further details please see project RRF Section V	Evidence Prodoc (pg. 25-28)	
12. Is the project's governance mechanism clearly defined in the project document, including composition of the project board? • 3: The project's governance mechanism is fully defined. Individuals have been specified for each position in the governance mechanism (especially all members of the project board.) Project Board members have agreed on their roles and responsibilities as specified in the terms of reference. The ToR of the project board has been attached to the project document. <i>(all must be true)</i>. • 2: The project's governance mechanism is defined; specific institutions are noted as holding key governance roles, but individuals may not have been specified yet. The project document lists the most important responsibilities of the project board, project director/manager and quality assurance roles. <i>(all must be true)</i> • 1: The project's governance mechanism is loosely defined in the project document, only mentioning key roles that will need to be filled at a later date. No information on the responsibilities of key positions in the governance mechanism is provided. *Note: Management Action or strong management justification must be given for a score of 1 The project will be implemented through DIM Modality, as described in the UNDP Programme and Operations Policies and Procedures (POPP). A carefully constituted Project Board will be responsible for making important management decisions by consensus to provide oversight on strategic matters, approve work plans and validate project progress. The Project Board decisions will be made in accordance with standards that shall ensure best value to money, fairness, integrity, transparency and effective competition. Project Board composition will be finalized as soon as project implementation begins.	2	
	Evidence Prodoc (pg. 23-24, 36-38)	
13. Have the project risks been identified with clear plans stated to manage and mitigate each risk? • 3: Project risks related to the achievement of results are fully described in the project risk log, based on comprehensive analysis drawing on the programme's theory of change, Social and Environmental Standards and screening, situation analysis, capacity assessments and other analysis such as funding potential and reputational risk. Risks have been identified through a consultative process with key internal and external	2	
	Evidence Risk Register - Annex 03	

stakeholders. Clear and complete plan in place to manage and mitigate each risk, reflected in project budgeting and monitoring plans. <i>(both must be true)</i> • 2: Project risks related to the achievement of results are identified in the initial project risk log based on a minimum level of analysis and consultation, with mitigation measures identified for each risk. • 1: Some risks may be identified in the initial project risk log, but no evidence of consultation or analysis and no clear risk mitigation measures identified. This option is also selected if risks are not clearly identified and/or no initial risk log is included with the project document. *Note: Management Action must be taken for a score of 1 Risks have been identified, risk management and mitigation measures have also been described, in consultation with stakeholders and lessons learnt from previous projects in the same area and with similar goals. See relevant Annex 3 to the ProDoc (Risk Log).	(prodoc pg. 64-67)	
EFFICIENT		
14. Have specific measures for ensuring cost-efficient use of resources been explicitly mentioned as part of the project design? This can include, for example: i) using the theory of change analysis to explore different options of achieving the maximum results with the resources available; ii) using a portfolio management approach to improve cost effectiveness through synergies with other interventions; iii) through joint operations (e.g., monitoring or procurement) with other partners; iv) sharing resources or coordinating delivery with other projects, v) using innovative approaches and technologies to reduce the cost of service delivery or other types of interventions. <i>(Note: Evidence of at least one measure must be provided to answer yes for this question)</i> The project will not take a start from zero, but build on previous work and methodology established under the project on Glacier and students. Also co-financing model has been adopted in this project to maximize cost efficiencies, develop ownership by national counterparts and produce better results. (as evidenced in prodoc (Page 02). On the other hand, the project will have a close liaison and coordination with other projects e.g. GLOF-II project of the UNDP, the relevant departments of the Karakoram International University and other actors in the field to complement each other. The Cost efficiency and effectiveness of the project has been well defined in Section IV (Project Management) pg: 13 of the Project Document.	Yes (3)	
15. Is the budget justified and supported with valid estimates? • 3: The project’s budget is at the activity level with funding sources, and is specified for the duration of the project period in a multi-year budget. Realistic resource mobilisation plans are in place to fill unfunded components. Costs are supported with valid estimates using benchmarks from similar projects or activities. Cost implications from inflation and foreign exchange exposure have been estimated and incorporated in the budget. Adequate costs for monitoring, evaluation, communications and security have been incorporated. • 2: The project’s budget is at the activity level with funding sources, when possible, and is specified for the duration of the project in a multi-year budget, but no funding plan is in place. Costs are supported with valid estimates based on prevailing rates. • 1: The project’s budget is not specified at the activity level, and/or may not be captured in a multi-year budget. The project’s budget is at the activity level with funding sources, and is specified for the duration of the project period in the multi-year budget. Costs are supported with valid estimates using benchmarks from similar projects and activities. Adequate costs for monitoring, evaluation, communications and security have been incorporated	3	Evidence Multi-year Workplan - (pg 31-35)

16. Is the Country Office/Regional Hub/Global Project fully recovering the costs involved with project implementation? • 3: The budget fully covers all project costs that are attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies (i.e., UPL, LPL.) • 2: The budget covers significant project costs that are attributable to the project based on prevailing UNDP policies (i.e., UPL, LPL) as relevant. • 1: The budget does not adequately cover project costs that are attributable to the project, and UNDP is cross-subsidizing the project. *Note: Management Action must be given for a score of 1 The budget covers significant project costs that are attributable to the project based on prevailing UNDP policies.		2
Evidence Prodoc (Pg 31-35)		
EFFECTIVE		
17. Have targeted groups been engaged in the design of the project? • 3: Credible evidence that all targeted groups, prioritising discriminated and marginalized populations that will be involved in or affected by the project, have been actively engaged in the design of the project. The project has an explicit strategy to identify, engage and ensure the meaningful participation of target groups as stakeholders throughout the project, including through monitoring and decision-making (e.g., representation on the project board, inclusion in samples for evaluations, etc.) • 2: Some evidence that key targeted groups have been consulted in the design of the project. • 1: No evidence of engagement with targeted groups during project design. The project has been designed based on consultations with key stakeholders including the experts of relevant government departments (forest, agriculture, meteorology, water management), research institutions (Karakoram International University, University of Baltistan) and civil society organizations working in the field. In addition, feedback from local marginalized groups related to risks and hazards (e.g. GLOFs, landslides, floods etc) and the subsequent damages to life and property received from time to time during the implementation of various other current and previous projects form the rationale and base for this project and have been accounted for in the design of this project. (Stakeholder Engagement pg:11)		2
Evidence Prodoc (pg 19)		
18. Does the project plan for adaptation and course correction if regular monitoring activities, evaluation, and lesson learned demonstrate there are better approaches to achieve the intended results and/or circumstances change during implementation? There is a detailed M&E plan for the project along with a dedicated human resource i.e. M & E officer at the PMU level. In accordance with UNDP Evaluation Policy guidelines, an end term evaluation is planned. Findings of regular monitoring activities (quarterly, annual) will feed into QPRs and APRs, for possible course correction.	Yes (3)	
19. The gender marker for all project outputs are scored at GEN2 or GEN3, indicating that gender has been fully mainstreamed into all project outputs at a minimum. *Note: Management Action or strong management justification must be given for a score of “no” The gender marker for the project is scored at GEN2 , indicating that gender has been fully mainstreamed into all project outputs at a minimum.	Yes (3)	
Evidence Prodoc (pg. 01)		

SUSTAINABILITY & NATIONAL OWNERSHIP		
20. Have national/regional/global partners led, or proactively engaged in, the design of the project? 3: National partners (or regional/global partners for regional and global projects) have full ownership of the project and led the process of the development of the project jointly with UNDP. 2: The project has been developed by UNDP in close consultation with national/regional/global partners. 1: The project has been developed by UNDP with limited or no engagement with national partners. At design stage, the Government of Gilgit Baltistan, EPA, KIU, Ministry of Climate Change have been consulted. The detailed discussion will be held for further engagement of extended stakeholders	1	
	Evidence Stakeholder (pg 19)	
21. Are key institutions and systems identified, and is there a strategy for strengthening specific/ comprehensive capacities based on capacity assessments conducted? 3: The project has a strategy for strengthening specific capacities of national institutions and/or actors based on a completed capacity assessment. This strategy includes an approach to regularly monitor national capacities using clear indicators and rigorous methods of data collection, and adjust the strategy to strengthen national capacities accordingly. 2: A capacity assessment has been completed. There are plans to develop a strategy to strengthen specific capacities of national institutions and/or actors based on the results of the capacity assessment. 1: Capacity assessments have not been carried out. Capacity building of relevant staff of the concerned departments (GB Met Department, GB DMA) is an in-built factor throughout the project. Through their engagement in data collection, and through sharing scientific knowledge with them, their capacities will be enhanced to understand the glacier inventory and high-altitude climate monitoring systems. In addition, there is a component for capacity building of students and faculty of local universities (Karakoram International University).	2	
	Evidence (to be attached)	
22. Is there a clear strategy embedded in the project specifying how the project will use national systems (i.e., procurement, monitoring, evaluations, etc.) to the extent possible? The project is implemented through DIM Modality, as described in the UNDP Programme and Operations Policies and Procedures (POPP). but will be implemented through close involvement of national stakeholders.	Yes (3)	
23. Is there a clear transition arrangement/ phase-out plan developed with key stakeholders in order to sustain or scale up results (including resource mobilisation and communications strategy)? The project will develop glacier hydrometeorological labs along with labs for Water, animal and plant research which will help in climate monitoring systems, mechanism for data archiving, sharing and updating, and also build capacities of local stakeholders in all these fields. The Geoshare network maintained in GB Government Department or the local university will be owned by the relevant authority and will be used for longer term data archiving and data sharing.	Yes (3)	

The glacier monitoring station will be handed over to EPA that will take the lead in continuing glaciers monitoring and assessment related activities in consultation with international universities and provide data and technical guidance to the concerned government authorities on technical terms. The systems in post-project times will be owned, maintained and operated by the departments (e.g. Meteorology)		
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[\[1\]](#) The three development settings in UNDP's 2018-2021 Strategic Plan are: a) Eradicate poverty in all its forms and dimensions; b) Accelerate structural transformations for sustainable development; and c) Build resilience to shocks and crises

[\[2\]](#) The six Signature Solutions of UNDP's 2018-2021 Strategic Plan are: a) Keeping people out of poverty; b) Strengthen effective, inclusive and accountable governance; c) Enhance national prevention and recovery capacities for resilient societies; d) Promote nature based solutions for a sustainable planet; e) Close the energy gap; and f) Strengthen gender equality and the empowerment of women and girls.

ANNEX II

UNDP SOCIAL AND ENVIRONMENTAL SCREENING TEMPLATE (v. JULY 2022)

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document at the design stage. Note: this template will be converted into an online tool. The online version will guide users through the process and will embed relevant guidance.

Project Information

Project Information	
1. Project Title	Water for Development (W4D): Support to mountain sustainable development and adaptation policies
2. Project Number (i.e. Quantum project ID, PIMS+)	01002665
3. Location (Global/Region/Country)	Pakistan
4. Project stage (Design or Implementation)	Design
5. Date	5 December, 2023

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the project mainstreams the human rights-based approach

The "Water for Development" project actively embraces a human rights-based approach, prioritizing inclusivity and transparency. Through inclusive decision-making, equitable water access, and community empowerment, the project addresses agricultural needs, promoting food security and livelihoods. Transparent documentation and an open data platform enhance accountability. Community based programs, including eco-tourism and the creation of new economic and employment opportunities, empower local communities with specific attention to vulnerable groups. By prioritizing capacity-building activities, the project promotes education rights. All this considered, the project not only tackles water challenges but also adopts a human rights-based approach, fostering sustainable and inclusive development in Gilgit Baltistan.

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

The Water for Development project prioritizes gender equality and women's empowerment by addressing the specific needs and roles of women in Gilgit-Baltistan. Recognizing women as crucial agents of change, the project adopts a gender mainstreaming approach in capacity building, ensuring their active participation in glaciological and eco-tourism interventions. The project commits to equal participation of women and men in capacity building programs for university students and faculty members, reducing gender biases. In the ecotourism component, women from local communities will benefit from training activities, and gaining economic and employment opportunities.

Briefly describe in the space below how the project mainstreams sustainability and resilience

The project ensures joint coordination with local counterparts and aligns with long-term regional initiatives for continued impact. Success prospects hinge on government commitment to climate and environmental monitoring, guaranteeing sustainability beyond the project's tenure. Technical assistance includes technology transfer, capacity building, and training for institutions like EPA GB, DMA GB, MET Department GB, Agriculture Department GB, and Tourism Department GB. Economic sustainability is reinforced by funds allocated to integrated local technologies, contributing to improved livelihoods, water management, and climate change mitigation. The project promotes ecotourism, and it contributes to create economic and employment opportunities for local communities. Environmental monitoring systems and strategic partnerships ensure long-term sustainability and replicability. The project emphasizes the strategic importance of employment creation in environmentally sustainable sectors, such as ecotourism, agriculture and livestock, aligning with national development goals.

Briefly describe in the space below how the project strengthens accountability to stakeholders

The project strengthens accountability to stakeholders through transparent and inclusive practices. Decision-making processes prioritize the active involvement of local communities, stakeholders, and women's groups. The open platform with data on water availability enhances transparency, allowing stakeholders access to crucial information. The project's emphasis on community-based programs, such as eco-tourism and alternative livelihoods, ensures that stakeholders have a voice in shaping project outcomes. Regular orientation sessions, information and increasing awareness campaigns ensure the involvement of a large audience both at the institutional and community level. The commitment to transparency, community engagement, and gender equality reinforces accountability to all stakeholders, fostering trust and collaboration among stakeholders throughout the project's implementation.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? <i>Note: Complete SESP Attachment 1 before responding to Question 2.</i>		QUESTION 3: What is the level of significance of the potential social and environmental risks? <i>Note: Respond to Questions 4 and 5 below before proceeding to Question 5</i>		QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High
Risk Description <i>(broken down by event, cause, impact)</i>	Impact and Likelihood (1-5)	Significance (Low, Moderate, Substantial, High)	Comments (optional)	Description of assessment and management measures for risks rated as Moderate, Substantial or High
Risk 1: If the staff of local concerned department have in-adequate capacities to conduct the project activities Principle 1: leave no one behind Human rights P2: Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?	I =2 L =2	Low		Internationally recognized experts from reputable universities and research centres, with extensive experience in these domains, will be enlisted for the project. They will collaborate closely with the staff of relevant departments and faculty members of local universities to carry out project activities. The IP will conduct thorough consultations with the concerned departments to pinpoint their capacity requirements for specific roles and responsibilities. The involvement of staff from relevant departments and local universities will be integral to field operations, training initiatives, and knowledge management throughout the duration of the project.
Risk 2: The project involves activities that are within or adjacent to Protected Areas (National Parks) Standard 1: Biodiversity conservation and sustainable natural resource management Q 1.2: Activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	I = 1 L = 3	Low		The implementing partner will be asked to develop SOPs for working in protected areas and they will be sensitized of the environmental concerns in particular area through joint sessions with relevant government departments. The government's related policies and strategies will also be consulted by the Implementing Partners before initiating field activities.
Risk 3: Risk from extreme weather conditions such as landslides, floods etc. Standard 2: Climate change and disaster risk Q 2.1: Areas subject to hazards such as earthquakes, floods, landslides, severewinds, storm surges, tsunami or volcanic	I =1 L = 3	Low		Weather conditions and meteorological forecasts will be closely monitored before planning field activities. Close liaison will be maintained before proceeding on field trips.

eruptions?				
Q 2.2.: Outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters?				
Risk 4: Engagement of security personnel mandatory for ex-pat experts may cause health, safety and security risks Standard 3: Community health, safety and security. Q 3.5. Transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)? Q 3.7. Influx of project workers to project areas? Q 3.8. Engagement of security personnel to protect facilities and property or to support project activities?	I= 1 L= 2	Low		As a precautionary measure, health awareness sessions will be arranged for security personnel before moving on field trips. They will be bound to show vaccination certificates for any pandemic and will follow relevant government SoPs notified from time to time.
Risk 5: Insufficient infrastructure may impede the successful implementation of ecotourism initiatives. Standard 3: Community health, safety and security. Q 3.1. Construction and/or infrastructure development (e.g. roads, buildings, dams)?	I= 1 L= 3	low		As part of the eco-tourism initiative, the implementing partner (IP) will undertake the improvement of necessary infrastructure, including access roads, ensuring that the construction aligns with environmental standards and adheres to local norms and culture.
Risk 6: The promotion of eco-tourism may have socio-economic implications, affecting local livelihoods and traditional practices. Standard 4: Cultural heritage Q 4.5. Utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	I= 1 L= 2	Low		This potential risk will be managed through the incorporation of local cultures and people into tourism activities. The tourist district will be co-managed by Ev-k2-CNR, the tourism department and local community or community-based organizations,
	QUESTION 4: What is the overall project risk categorization?			
	Low Risk	x		
	Moderate Risk	☐		
	Substantial Risk	☐		
	High Risk	☐		

QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)				
Question only required for Moderate, Substantial and High Risk projects				
<u>Is assessment required? (check if "yes")</u>	x			Status? (completed, planned)
<i>if yes, indicate overall type and status</i>		x	Targeted assessment(s)	Planned during project
		x	ESIA (Environmental and Social Impact Assessment)	Planned during project
		☐	SESA (Strategic Environmental and Social Assessment)	
Are management plans required? (check if "yes")	☐			
<i>If yes, indicate overall type</i>		☐	Targeted management plans (e.g. Gender Action Plan, Emergency Response Plan, Waste Management Plan, others)	

		☐	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	
		☐	ESMF (Environmental and Social Management Framework)	
	Based on identified risks, which Principles/Project-level Standards triggered?			
	Overarching Principle: Leave No One Behind			
	Human Rights	x		
	Gender Equality and Women's Empowerment	☐		
	Accountability	☐		
	1. Biodiversity Conservation and Sustainable Natural Resource Management	x		
	2. Climate Change and Disaster Risks	x		
	3. Community Health, Safety and Security	x		
	4. Cultural Heritage	x		
	5. Displacement and Resettlement	☐		
	6. Indigenous Peoples	☐		
	7. Labour and Working Conditions	☐		
	8. Pollution Prevention and Resource Efficiency	☐		

Final Sign Off

Final Screening at the design-stage is not complete until the following signatures are included

Signature	Date	Description
QA Assessor		UNDP staff member responsible for the project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
INSTRUCTIONS: The risk screening checklist will assist in answering Questions 2-6 of the Screening Template. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall risk categorization of the project, and (3) determine required level of assessment and management measures. Refer to the SES toolkit for further guidance on addressing screening questions.		
Overarching Principle: Leave No One Behind		Answer (Yes/No)
Human Rights		
P.1	Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
P.2	Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?	Yes
P.3	Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights?	No
<i>Would the project potentially involve or lead to:</i>		
P.4	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
P.5	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? ¹⁶	No
P.6	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?	No
P.7	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Gender Equality and Women's Empowerment		
P.8	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?	No
<i>Would the project potentially involve or lead to:</i>		
P.9	adverse impacts on gender equality and/or the situation of women and girls?	No
P.10	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
P.11	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? <i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i>	No
P.12	exacerbation of risks of gender-based violence? <i>For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.</i>	No

¹⁶ Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people.

Sustainability and Resilience: Screening questions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below	
Accountability	
<i>Would the project potentially involve or lead to:</i>	
P.13 exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?	No
P.14 grievances or objections from potentially affected stakeholders?	No
P.15 risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project?	No
Project-Level Standards	
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management	
<i>Would the project potentially involve or lead to:</i>	
1.1 adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? <i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>	No
1.2 activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Yes
1.3 changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4 risks to endangered species (e.g. reduction, encroachment on habitat)?	No
1.5 exacerbation of illegal wildlife trade?	No
1.6 introduction of invasive alien species?	No
1.7 adverse impacts on soils?	No
1.8 harvesting of natural forests, plantation development, or reforestation?	No
1.9 significant agricultural production?	No
1.10 animal husbandry or harvesting of fish populations or other aquatic species?	No
1.11 significant extraction, diversion or containment of surface or ground water? <i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	No
1.12 handling or utilization of genetically modified organisms/living modified organisms? ¹⁷	No
1.13 utilization of genetic resources? (e.g. collection and/or harvesting, commercial development) ¹⁸	No
1.14 adverse transboundary or global environmental concerns?	No
Standard 2: Climate Change and Disaster Risks	
<i>Would the project potentially involve or lead to:</i>	

¹⁷ See the [Convention on Biological Diversity](#) and its [Cartagena Protocol on Biosafety](#).

¹⁸ See the [Convention on Biological Diversity](#) and its [Nagoya Protocol](#) on access and benefit sharing from use of genetic resources.

2.1 areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions?	Yes
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2.2	outputs and outcomes sensitive or vulnerable to potential impacts of climate change or disasters? <i>For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes</i>	Yes
2.3	increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	No
2.4	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	No
Standard 3: Community Health, Safety and Security		
<i>Would the project potentially involve or lead to:</i>		
3.1	construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams)	No
3.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	No
3.3	harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	No
3.4	risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	No
3.5	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during \ and operation)?	Yes
3.6	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	No
3.7	influx of project workers to project areas?	Yes
3.8	engagement of security personnel to protect facilities and property or to support project activities?	Yes
Standard 4: Cultural Heritage		
<i>Would the project potentially involve or lead to:</i>		
4.1	activities adjacent to or within a Cultural Heritage site?	No
4.2	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	No
4.3	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.4	alterations to landscapes and natural features with cultural significance?	No
4.5	utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	Yes
Standard 5: Displacement and Resettlement		
<i>Would the project potentially involve or lead to:</i>		
5.1	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	No
5.2	economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	risk of forced evictions? ¹⁹	No
5.4	impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No

Standard 6: Indigenous Peoples	
<i>Would the project potentially involve or lead to:</i>	
6.1 areas where indigenous peoples are present (including project area of influence)?	No
6.2 activities located on lands and territories claimed by indigenous peoples?	No
6.3 impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? <i>If the answer to screening question 6.3 is "yes", then Standard 6 requirements apply, and the potential significance of risks related to impacts on indigenous peoples must be Moderate or above. *</i>	No
6.4 the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5 the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6 forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? <i>Consider, and where appropriate ensure, consistency with the answers under Standard 5 above</i>	No
6.7 adverse impacts on the development priorities of indigenous peoples as defined by them?	No
6.8 risks to the physical and cultural survival of indigenous peoples?	No
6.9 impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? <i>Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.</i>	No
Standard 7: Labour and Working Conditions	
<i>Would the project potentially involve or lead to: (note: applies to project and contractor workers)</i>	
7.1 working conditions that do not meet national labour laws and international commitments?	No
7.2 working conditions that may deny freedom of association and collective bargaining?	No
7.3 use of child labour?	No
7.4 use of forced labour?	No
7.5 discriminatory working conditions and/or lack of equal opportunity?	No
7.6 occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	No

¹⁹ Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights.

* Note: revised July 2022 modifying presumption of risk significance from Substantial or higher to Moderate or higher.

Standard 8: Pollution Prevention and Resource Efficiency	
<i>Would the project potentially involve or lead to:</i>	
8.1 the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
8.2 the generation of waste (both hazardous and non-hazardous)?	No
8.3 the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	No
8.4 the use of chemicals or materials subject to international bans or phase-outs? <i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol, Minamata Convention, Basel Convention, Rotterdam Convention, Stockholm Convention</i>	No
8.5 the application of pesticides that may have a negative effect on the environment or human health?	No
8.6 significant consumption of raw materials, energy, and/or water?	No

ANNEX III: OFFLINE PROJECT RISK REGISTER TEMPLATE

Project Title: W4D						Project Number: 01002665	Date: 31-Dec-24	
#	Event	Cause	Impact(s)	Risk Category and Sub-category (including Risk Appetite)	Impact, Likelihood & Risk Level (see Annex 3 Risk Matrix)	Risk Valid From/To	Risk Owner (individual accountable for managing the risk)	Risk Treatment and Treatment Owner
1	Lack of cooperation by the local department staff in the implementation of the project activities.	Inadequate collaboration and support from the staff of local departments, specifically agriculture, water management, and tourism, pose a substantial risk to the smooth implementation of project activities. The success of the project heavily relies on the active engagement and cooperation of these departments. Challenges in obtaining their support may lead to delays, inefficiencies, and hinder the achievement of project objectives.	I= 1	7. STRATEGIC (7.3. Stakeholder relations and partnerships) - UNDP Risk Appetite: OPEN TO SEEKING	Likelihood: 2 - Low likelihood Impact: 1 - Negligible Risk level: LOW (equates to a risk appetite of MINIMAL)	From: 01-September-24 To: 31-August-27	Programme Analyst RECCU	Sharing information on activity progress and results with institutional counterparts at the provincial level and the establishment in the Project Board will ensure joint coordination of the initiative and continued ownership by local counterparts. Risk treatment Owner: Project Manager/EVK2CNR
2	Extreme weather conditions, landslides, floods, etc.	The geographical location of the project area, characterized by mountainous terrain, exposes it to the inherent risks associated with extreme weather conditions, landslides, floods, and other natural disasters. These environmental challenges pose a potential threat to the successful implementation of the project.	I= 2	1. SOCIAL AND ENVIRONMENTAL (1.5. Climate change and disaster risks) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a	From: 01-September-24 To: 31-August-27	Programme Analyst RECCU	Weather conditions and forecasts will be closely monitored through periodic risk analyses and always before planning field activities. Risk Treatment Owner: Project Manager/EVK2CNR

#	Event	Cause	Impact(s)	Risk Category and Sub-category (including Risk Appetite)	Impact, Likelihood & Risk Level (see Annex 3 Risk Matrix)	Risk Valid From/To	Risk Owner (individual accountable for managing the risk)	Risk Treatment and Treatment Owner
					risk appetite of EXPLORATORY)			
3	Security issues in GB	As a result of security issues in GB pose a risk to the safety of project personnel, including international experts and technicians involved in various project components and also the unforeseen security situations may result in temporary or prolonged restrictions on access to project sites, hindering field activities, and data collection.	I= 2	8. SAFETY AND SECURITY (8.2. Political instability) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 2 - Low likelihood Impact: 2 - Minor Risk level: LOW (equates to a risk appetite of CAUTIOUS)	From: 01-September-24 To: 31-August-27	Programme Analyst RECCU	Close contact will be maintained with security personnel in the region, who will be kept constantly informed of movements and activities in the field. Risk Treatment Owner: Project Manager/EVK2CNR
4	Technical	Dependence on advanced monitoring tools may pose risks if technology malfunctions or faces compatibility issues.	I= 3	3. OPERATIONAL (3.8. Capacities of the partners) - UNDP Risk Appetite: EXPLORATORY TO OPEN	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	From: 01-September-24 To: 31-August-27	Programme Analyst RECCU	By investing in the capacity building and trainings of local department staff and cultivating a collaborative approach, the project can mitigate the risk of technological malfunctions. Risk Treatment Owner: Project Manager/EVK2CNR
5	Logistics	The remote project locations in Gilgit Baltistan may pose challenges in transporting equipment, experts, and maintaining regular communication.	I= 1	4. ORGANIZATIONAL (4.3. Implementation arrangements) - UNDP Risk	Likelihood: 2 - Low likelihood Impact: 1 - Negligible	From: 01-September-24 To: 31-August-27	Programme Analyst RECCU	Project will collaborate with local partners and communities to leverage their knowledge of the terrain, establish local

#	Event	Cause	Impact(s)	Risk Category and Sub-category (including Risk Appetite)	Impact, Likelihood & Risk Level (see Annex 3 Risk Matrix)	Risk Valid From/To	Risk Owner (individual accountable for managing the risk)	Risk Treatment and Treatment Owner
				Appetite: EXPLORATORY TO OPEN	Risk level: LOW (equates to a risk appetite of MINIMAL)			support networks, and enhance the efficiency of transportation and deployment and will invest in enhancing communication infrastructure, including satellite communication systems, to ensure consistent and reliable connectivity across remote project sites. Risk Treatment Owner: Project Manager/EVK2CNR
	Public Health Risk	Zoonotic Diseases: Researching pathology labs for zoonotic diseases involves handling potentially hazardous materials, requiring strict safety protocols.	I= 2	1. SOCIAL AND ENVIRONMENTAL (1.6. Community health, safety and security) - UNDP Risk Appetite: CAUTIOUS	Likelihood: 2 - Low likelihood Impact: 2 - Minor Risk level: LOW (equates to a risk appetite of CAUTIOUS)	From: 01-September-24 To: 31-August-27	Programme Analyst RECCU	Establish and strictly enforce biosafety protocols in all pathology labs, ensuring compliance with international standards for handling zoonotic materials. Risk Treatment Owner: Project Manager/EVK2CNR
6	Cultural Sensitivity	Ecotourism interventions may face challenges in respecting and preserving the local culture, leading to cultural conflicts.	I= 1	1. SOCIAL AND ENVIRONMENTAL (1.12. Stakeholder engagement) - UNDP Risk	Likelihood: 2 - Low likelihood Impact: 1 - Negligible	From: 01-September-24	Programme Analyst RECCU	This potential risk will be managed through incorporation of local cultures and people into tourism activities.

#	Event	Cause	Impact(s)	Risk Category and Sub-category (including Risk Appetite)	Impact, Likelihood & Risk Level (see Annex 3 Risk Matrix)	Risk Valid From/To	Risk Owner (individual accountable for managing the risk)	Risk Treatment and Treatment Owner
				Appetite: CAUTIOUS	Risk level: LOW (equates to a risk appetite of MINIMAL)	To: 31- August-27		The tourist district will be co managed by RP, tourism department and local community or community based organizations, Risk Treatment Owner: Project Manager/EVK2CNR
7	Regulatory and Compliance	Permitting Issues: Obtaining necessary permits for research, monitoring, and laboratory activities may face delays or complications.	I= 3	7. STRATEGIC (7.5. Government commitment) - UNDP Risk Appetite: OPEN TO SEEKING	Likelihood: 3 - Moderately likely Impact: 3 - Intermediate Risk level: MODERATE (equates to a risk appetite of EXPLORATORY)	From: 01- September-24 To: 31- August-27	Programme Analyst RECCU	Project will foster positive and collaborative relationships with government agencies by coordinating regularly. Project will keep them informed about the project's goals, benefits, and adherence to regulations. Risk Treatment Owner: Risk Treatment Owner: Project Manager/EVK2CNR