# **General Information**

Fund	Pakistan UNSDF III							
Title		Living River Initiative- ECOLOGICAL RESTORATION OF THE INDUS RIVER BASIN FOR A CLIMATE RESILIENT FUTURE						
MPTFO Project Id	To be assigned by MPTFO							
Contacts	Contact Type	Name	e-m	ail	Position	Additional e- mail	Telephone	Skype
	Project Lead	Mehwish Ali	mehw	vish.ali@fac	o.org GIS Officer	fao-pk@fao.org	+92519255491	-
Description	The Indus Rive however, it is population presustain life for conserve the rein Pakistan of Pakistance of contribute an Pakistan. In for required to be for climate fi proposal is attained to the prop	s under tessure and future ge esource baduring its Cooperation Indus Rivery well apthe UN to doubled ur months prepared nancing a	hreat pollu nerat ase, u for on Fra er bas opreci o dev upon to ur nd d	trion hereions. Par se it wis mulation amework in. The iated, a province from Joite existile	climate changence putting a continuous continuous characteristics of the continuous cont	ge, environme question mark of ore, needs a Pote the ecosyster of United National Market of the concept with enment requestional internation of April 2022, to cover gaps, in	ntal degrada on its resilien erspective Pla m. The UN Sy cions Sustair idea of ecolo the Governn ted the tech I stakeholde onal initiative he Master Pl lentify frame	ation, ce to an to stem nable ogical nent, inical rs to es in an is work
Universal	Gender Equality Marker			,				
Markers	Low		Low risk					
Fund Specific Markers	UNSDF/OPIII outcome							
	Geographical Scope Name of the Region		on	Region(s)	Country(ies	s)		
Geographical Scope	All over Pakista	(Pun Khyb inclu	four provinces of Pakistan unjab, Sindh, Balochistan and yber Pakhtunkhwa) cluding two ministrative/federating units		South Asia	Pakistan		
		adm	inistr	ative/fe				
Participating Organizations	Participating Organizations	nGO:		ative/fe	derating units	Implementin	g Partners	

Partners	Organization (FAO)		
	Budget	Agency	Amount
Programme and Project Cost	Budget Requested	FAO	83 823
	Total		83 823
Keywords	Indus River Basin, Re	estoration,	Climate Change
	Anticipated Start Date	1 Februa	ry 2022
Programme Duration	Duration (In months)	5	
	Anticipated End Date	30 June 2	2022

### Pakistan

### Comments

Predominantly from One UN Fund for Pakistan transfer, cofinancing of 97 973 by FAO from core funds/technical cooperation

Date

# FOR THE UNITED NATIONS RESIDENT COORDINATOR OFFICE (UNRCO)

Julien Harneis Resident Coordinator in Pakistan



# FOR THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)

Florence Rolle Participating UN Organization FAO Representative in Pakistan



# Proposal on Living River Initiative

### "ECOLOGICAL RESTORATION OF THE INDUS RIVER BASIN FOR A CLIMATE RESILIENT FUTURE"

# **Background**

The Indus River flows from the mountains of Azad Jammu & Kashmir, Gilgit-Baltistan and Khyber Pakhtunkhwa; it also feeds millions in Punjab, Balochistan and Sindh before entering into Arabian Sea where it supports marine ecosystem that relies on freshwater. More than ninety-five percent of the population of Pakistan live within the confines of Indus River Basin. This river basin has sustained life, in what is now Pakistan, for over 5 000 years from the ancient civilizations of Harappa and Mohenjo Daro to current civilization.

However, climate change is shrinking the glaciers and making rains less predictable, increasing agricultural production risks and washing away the homes of the most indigent. Pollution from industry, agriculture and domestic sewage is sickening tens of millions of people who drink from its waters. Contamination from arsenic, nitrates, metals, plastic waste and microbiological contaminants are all at dangerous levels. Environmental degradation at the river mouth is increasing salinization of the delta and destroying marine ecosystems and the fishing economy.

Without immediate and concerted action this River Basin, which has sustained life for millennia, will falter: agricultural production will drop and flooding will increase, contributing to malnutrition, water borne and non-communicable diseases. Children, agricultural workers and urban slum dwellers will be the most affected.

Despite the centrality of the river basin to life in Pakistan, the Government has no long-term integrated plan to sustain life in future, although there are numerous relevant projects addressing issues within the Basin. As a result, actions are disparate and there are major gaps in the response. This paper proposes to develop a MasterPlan to unite government initiatives and draw support from the United Nations, donor partners, private sector, academia and civil society. The Plan will be financed by instruments outlined at 2021 United Nations Climate Change Conference (COP26) and other contributions from public funds and the partners.

# **Restoration Plan**

The Master Plan will be developed with three work streams; to protect the source, use the river efficiently and sustainably and protect marine life.

### **Upstream: Protect the source:**

- conserve and restore mountain ecosystems, watersheds and glaciers;
- reinvigorate transboundary water initiatives;
- sustainable management of forests and rangelands;
- increase responsible tourism;

- monitor river flows for very early warning and early action; and
- enhance the water storage capacity.

### Plains: Clean and efficient management of river basin for peoples' health and sustainable development:

- enhance the productivity and incomes of farmers with sustainable food production and climate resilient agriculture and water management practices;
- improve water resource management infrastructure;
- regulate urbanization and migration of population in response to economic opportunities and climate change;
- regulate industrialization and treatment of industrial, agricultural and domestic waste and pollution;
- protect biodiversity and natural habitats;
- manage and use underground water resources sustainably; and
- strengthen resilience and adaptive capacity to climate related disasters.

### Downstream: Protect marine ecosystems to sustain life:

- reduce marine pollution;
- protect and restore coastal and marine ecosystems, mangroves and riverine forests;
- increase the economic benefits from sustainable use of marine resources and support small scale fishers; and
- improve the ocean health and biodiversity dependent upon fresh water flows.

This Plan will build upon the national initiatives such as Ten Billion Tree Tsunami, Recharge Pakistan, Clean and Green Pakistan and other investments going into different aspects of Indus basin including building storage capacities, improving water conveyance and use efficiencies. It will guide to raise climate financing with Green Bonds, Nature Performance Financing and Blue Financing. The Plan contributes to the Sustainable Development Goals on zero hunger, climate action, life below water and life above land. It will also compliment and contribute to the National Adaptation Plan and the Nationally Determined Contributions.

# Strategy to Formulate the Master Plan

While agreeing to the idea of the UN on ecological restoration of the Indus basin the Government sought the technical assistance of the UN to formulate Perspective Plan in four months' time. The UNRC being lead, appointed United Nations Food and Agriculture Organization (FAO) as lead agency for providing support to the Government. The Plan will build upon existing initiatives, bringing them together and identifying gaps in the response that needs action. The Plan will be a framework for adaption financing, nature-based solutions from the governments and partners. The Plan will be accompanied by a communication strategy engaging all stakeholder including civil society.

Transformative levers will be federal coordination, provincial leadership and large-scale mobilization. The Plan formulation process will be UN assisted, country-driven and participatory and follows the transparent approach. The process will connect wide range of stakeholders including governments, parliamentarians, development partners, UN agencies, academia, media, think tanks, private sector and civil society relevant to the subjects of population, economy and the environment. Detailed work plan is given at Annex A.

A Secretariat will be established in the MoCC with coordination units in each of province or region based preferably in P&D Departments. FAO will provide Secretariat support including technical input, travel, etc. The Secretariat will comprise of following structure. The TORs for each of the positions are given in Annex B.

- Master Plan Lead
- National Coordinator
- Eight Provincial/Regional Coordinators
- Communication Specialist
- Data Analysis, Visualization and Presentation Development Expert

# SAPM, MoCC Master Plan Lead National Coordinator Coordinator

### Structure of the Secretariat

\*Based in MoCC, FAO will provide staff and support services including logistics and travel to the Secretariat

The Master Plan formulation will cost USD 181 795.72 to be co-financed by Pakistan UNSDF-III (USD 83 822.72) and FAO Core funds (USD 97 973). Detailed costing of UNSDF-III contribution is given in Annex D.

- 1. The Secretariat will undertake following activities for the development of Master Plan forecological restoration of Indus Basin:
  - perform review of existing relevant acts, policies and development frameworks vis-à-vis mapping

of current initiatives supported by public funds and development partners;

- identify policy, investment and institutional gaps and suggest new initiatives and projects to be funded by government and partners;
- facilitation of wider consultations and dialogue with government, development partners, academia, private sector, and civil society to ensure alignment of the Plan with national purpose and developmental priorities at national and provincial level;
- propose activities related to coordination for restoration of diverse ecosystems within Indus basin from mountains, plains to marine ecosystems. It will also include conservation and restore mountain ecosystems, watersheds, glaciers, and sustainable management of forests and rangelands;
- identification of ways to access innovative global financing for climate change management;
- propose activities related to enhancing resilience and adaptive capacity to climate changes and natural disasters and activities such as monitor flows for very early warning action;
- promotion of sustainable food production and climate resilient agriculture and water management practices to enhance the productivity and incomes of farmers;
- promotion of clean, efficient and sustainable use of the river and canals for peoples' health and a sustainable economy;
- technical inputs for improving water resource management infrastructure;
- regulation of urbanization and migration of population in response to economic opportunities and climate change;
- measures to regulate industrialization and treatment of industrial, agricultural and domestic waste and pollution and measures to protect biodiversity and natural habitats; and
- Downstream, protect marine ecosystems to sustain life, reduce marine pollution along with the increase in the economic benefits from sustainable use of marine resources and fisheries.
- 2. Another key activity will be to develop a comprehensive Communication Strategy to support the Master Plan and to strategize its implementation.

Result framework including risks, assumptions, outputs and outcome is attached at Annex C.

### **Partners**

- Ministerial Champion Ministry of Climate Change
- Federal Government: Planning Commission, Ministry of Water Resources, National Disaster Management Authority, Ministry of National Food Security and Research; Ministry of Industries and Production, Ministry of Health, Pakistan Meteorological Department, Ministry of Science and Technology and their attached departments.
- Provincial and Administrative regions Governments Planning & Development, Agriculture, Irrigation, Environment, Industry, Livestock, Fisheries, and Health Departments, PDMAs, and EPAs
- Parliamentarians: Parliamentary Committees, PM Committee on Climate Change

- IFIs and Member States: World Bank, Asian Development Bank, European Union; Foreign, Commonwealth and Development Office (FCDO)
- Civils Society and Research entities: IWMI IUCN, WWF, ICIMOD, SDPI and other civil society organizations
- Academia: Well reputed and high-ranking universities both public and private in Pakistan
- UN Agencies: FAO, ILO, IFAD, UNDP, UNEP, UNESCAP, UNICEF, UNIDO, UNESCO, UNV, UN Habitat, UN Women, WFP, WHO, ITC.

# Annex A

# Work Plan

Sr.			Timeline			
No.	ACTIVITY	Feb	March	April	May	June
1	Establishment of Secretariat at MoCC					
2	Launch of Master Plans formulation at National level					
3	Review of literature to look at evolution/historical transformation and climate change scenarios and establish the empirical evidence to help design sustainable management of the resource base in Indus basin.					
4	Review of relevant acts, policies, and development frameworks as well as sectoral policies and mapping of current initiatives supported by public funds and development partners to identify policy, investment and institutional gaps and suggest new initiatives and projects to be supported under the Master Plan.					
1	Provincial dialogues and consultations including parliamentarians, academia, media, think thanks, UN agencies, Civil Society organization, private sectors					
6	Consolidation of all provincial/regional reports					
7	Organization of a national level event to share the findings/recommendations to all stakeholders to seek their views and suggestions					
8	Communication strategy for the Master Plan					
9	Refining of Master Plan					
10	Presentation to the Prime Minister's Committee on Climate Change and supporting the process through different Government forums including NEC					

Annex: B

# **Duties and Responsibilities of Secretariat Staff**

### Master Plan Lead:

- Master Plan Lead is expected to work under the overall guidance of the SAPM and in close coordination of UNRC and FAOR to provide Technical Assistance in the following areas;
- assist the SAPM in formulation of Master Plan on Prime Minister Initiative on "Living River System -Ecological Restoration of the Indus River Basin for Climate Resilient Future";
- create a Vision and develop a Strategic Framework following a participatory process for ecological restoration of the Indus basin for adaptation financing and nature-based solution for public, private and partner's interventions;
- strategize the implementation of the Plan with identification of short, medium and long-term interventions;
- among the short-term interventions, identify projects to be implemented through the PSDP and ADPs included in the budget 2022-23. Projects for international funding both loan and donor assistance may also be identified for fast-track implementations;
- substantive technical inputs to align the interventions with global conventions and commitments of the Government of Pakistan;
- develop knowledge products and lead the formulation of communications strategy of the Master Plan;
- prepare a final presentation to be delivered by the SAPM in a national event organized by the MoCC,
   Government of Pakistan; and
- prepare final document of Master Plan (short and crispy with infographics) for sharing with Cabinet and Climate Change Committee of the Prime Minister.

### **National Coordinator**

Stationed in Ministry of Climate Change (MoCC), Islamabad, the Consultant while acting as National Coordinator of the Secretariat established in the MoCC to support the formulation of Master Plan on ecological restoration of the Indus basin for climate resilient future. S/he will work under overall supervision and guidance of the Special Assistant to Prime Minister (SAPM) on Climate Change, Master Plan Lead and in close coordination with UNRC and FAOR and other key Government stakeholders and United Nations agencies to provide Technical Assistance in the following areas:

- support the Master Plan Lead in formulation of Master Plan on Prime Minister Initiative on "Living River System - Ecological Restoration of the Indus River Basin for Climate Resilient Future";
- review of literature to look at evolution/historical transformation and climate change scenarios and establish the empirical evidence to help design sustainable management of the resource base in Indus basin;

- coordinate review of relevant acts, policies and development frameworks as well as sectoral policies
  and mapping of current initiatives supported by public funds and development partners to identify
  policy, investment and institutional gaps and suggest new initiatives and projects to be supported
  under the Master Plan;
- ensure coherence and alignment of the Plan with other adaptation related initiatives, supported by international development partners in Pakistan;
- facilitation and coordination of consultation and dialogue with government, development partners, academia, private sector and civil society to ensure alignment of the Plan with national purpose and developmental priorities at different geographical locations in the basin;
- develop awareness raising materials, and coordinate the formulation of communications strategy of the Master Plan;
- travel and participate in the consultative meetings/workshops;
- assist the Advisor in preparing final presentation to be delivered by the SAPM in a national event organized by the MoCC, Government of Pakistan;
- support preparation of final document of Master Plan (short and crispy with infographics) for sharing with Cabinet and Climate Change Committee of the Prime Minister; and
- act as head of Secretariat and lead a team of experts engaged to support the Master Plan formulation located in Islamabad and at provincial headquarters.

# **Provincial/Regional Coordinators**

Stationed in provincial/regional headquarters (Peshawar, Lahore, Karachi, Quetta, Muzaffarabad and Gilgit), preferably with P&D Boards/departments the Provincial Coordinators are expected to work under the overall guidance of the National Coordinator based in Islamabad in close coordination with UNRC and FAOR and other key Government stakeholders and United Nations agencies to provide support at provincial level. Key responsibilities of the Provincial/Regional Coordinators are as under:

- support the National Coordinator in the formulation of Master Plan on Prime Minister Initiative on "Living River System - Ecological Restoration of the Indus River Basin for Climate Resilient Future" through overall coordination with the provincial government and other relevant stakeholders at the provincial level;
- facilitation, coordination and organization of consultations with provincial government's departments, development partners, academia, private sector, and civil society to ensure alignment of the Plan with provincial/regional developmental priorities at different geographical locations in the provincial jurisdiction of the Indus River basin;
- lead the review of relevant provincial acts, policies and development framework as well as mapping
  of current initiatives supported by public and development partner's funds to identify gaps and
  suggest new initiatives and projects under Master Plan;
- providing secretariat support to various meetings (including meetings of UN senior leadership with provincial Governments and other stakeholders);

- track progress of decisions, action points of meetings and consultations at provincial level;
- responsible for collection of relevant documents and consolidate provincial level information as and when required during the assignment period;
- develop and assist in preparation of knowledge and awareness raising materials and support the formulation of communications strategy and communication campaign; and
- communicate with other provincial coordinators appointed by the project, to share information on activities and support each other for uniform approach across provinces and regions.

### **Communications Specialist**

Stationed in the Ministry of Climate Change (MoCC) in Islamabad, the Communications Consultant will work under the guidance of the National Coordinator in close coordination with the UNRC and FAOR as well as other key Government stakeholders and UN agencies to provide support to the Secretariat for formulation of communication strategy of the Initiative. Key responsibilities of the Provincial Coordinators are as under:

- support the National Coordinator in formulation of the Master Plan on Prime Minister's Initiative
  on "Living River System Ecological Restoration of the Indus River Basin for Climate Resilient
  Future";
- assist in developing a communications strategy, campaign and action plan with timelines for advocacy and promotion of the initiative;
- coordinate with National and Provincial Coordinators to identify and map province and regionspecific challenges and priorities and build related advocacy measures into the communications action plan to address them;
- define the key target audiences and plan campaign and action plan accordingly;
- work with MoCC and relevant UN agencies, development partners and government departments to execute the communications plan;
- identify and build support groups in the media, in each province/region, to amplify advocacy and awareness efforts;
- develop knowledge and awareness raising materials to support the communications strategy of the Master Plan;
- develop briefs, infographics, templates and other design material to be used in promotional
  material such as advertisements, social media posts, presentations, monthly updates, and reports,
  etc. Link with official twitter and Facebook handles of the MoCC and update through posts after
  review on weekly basis;
- travel to different regions to ensure photographic and video coverage of priority issues. Maintain an album catalogue and watermarked the multimedia contents;

- assist in identifying and engaging public figures to raise awareness about the issue and act as influencers;
- assist in preparing key messages for social media with high impact advocacy content. Promote the content based on these key messages in a defined social media campaign;
- engage both electronic (Radio, TV) and print media to raise awareness about the Initiative;
- engage people and groups already working on the climate change and highlight the importance of collaboration;
- work with the National Coordinator to prepare a final presentation to be delivered by the SAPM in a national event organized by the MoCC, Government of Pakistan;
- prepare final document of Master Plan (including infographics) for sharing with Cabinet and Climate Change Committee of the Prime Minister; and
- consistently uphold brand and style guidelines, and communicate and potentially teach these standards to others internally.

# Data Analyst & Presentation Development Expert

Stationed in Islamabad, Data Analyst is expected to work under the overall guidance of National Coordinator in close coordination of the Communication expert, UNRC and FAOR and other key Government stakeholders and United Nations agencies to provide support to the Initiative.

Key responsibilities of Data Analyst are as under:

- data exploration, analysis and modeling performed on available primary and secondary datasets, resulting in different visualized products by using different tools;
- liaise with the stakeholders to identify data needs or to define new data collection, processing, and presentation;
- integrate and process different datasets from varying formats, as well as use of relational databases like SQL/MySQL;
- develop visualization based on business intelligence tools like Microsoft Power BI/Google data studio and present them in a concise manner;
- familiarity and relevant experience of web development in Information/Content Management systems, or in using other web based technologies (HTML, Angular, Bootstrap etc.);
- basic skills of using/developing GIS based products in available online tools like Google Maps;
- develop documents/ artifacts using technical skills and tools including Excel, Word, Photoshop,
   Illustrator, and InDesign etc.;
- work in collaboration with different organizations across various departments;
- employ and utilize a variety of multimedia platforms to display services and capabilities and deliver concept through multimedia and data visualization;

- designing presentations by using maps, charts and interactive graphics in Microsoft Office; and technologies, and to present in an interactive manner that can capture the audience's attention
- handle both Mac/Windows based environment.

# Annex C

# Result Framework

Goal	Protection and restoration of Indus river basin ecosystem for sustainable development and climate resilient future.					
Outcomes	Outcome 1: Master Plan to protect and restore Indus River Basin starting from the mountains, through the plains and till the Sea is developed.	Outcome 2: Communication Strategy for the implementation of Master Plan is developed.				
Outputs	Output 1.1: Secretariat at MoCC is established and functional at both provincial and national level.  Output 1.2: Inventory, stocktaking and mapping of existing initiatives, acts and policies are performed.  Output 1.3 Comprehensive and detailed stakeholder consultations at federal and provincial levels are performed  Output 1.4: Improved practices and actionable interventions for the conservation and restoration of the different ecosystems within the Indus basin including the mountain, forests, plains, marine ecosystems and delta are identified/proposed.	Output 2.1: Communication materials, knowledge and awareness raising materials, for the Master Plan are developed.  Output 2.2: Comprehensive communication strategy for the implementation of the Master Plan is developed.				

# Assumptions

Governments including federal and provincials will support the Initiative as it aligns well with existing national priorities such as Ten Billion Tree Tsunami, Recharge Pakistan, the Clean and Green Pakistan and other investments going on in different aspects of Indus basin including building storage capacities, improving water conveyance and use efficiencies.

The Government has continued commitment to mainstreaming Indus Basin approach for climate change adaptation, as well as its willingness to invest in adaptation and transformation to address the effects of climate change and natural hazards, in both rural and urban areas.

Communication campaign/strategy is strong and well framed.

# Risks

High political sensitivity of water subject may create problem in gaining provinces' support.

Basin approach may not be the priority for future governments for addressing climate change issues.

Challenges in terms of coordination between federal, provincial and local stakeholders, coupled with capacity limitations.

Donors and Member States funding not aligned with Indus basin approach and masterplan.

UN agencies and stakeholders' deviation from long term/main goals towards short term/temporary targets.

# Annex D

# **Budget Estimates**

CATEGORY	Total Amount (USD)	PUNO1(FAO)
Staff and other personnel costs	51 346	51 346
Supplies, Commodities, Materials	2 500	2 500
Equipment, Vehicles and Furniture including Depreciation		
Contractual Services		
Travel	2 500	2 500
Transfers and Grants Counterparts		
General Operating and Other Direct Costs	21 993	21 993
Total Programme Costs	78 339	78 339
Indirect Support Costs	5 484	5 484
TOTAL Pass-Through Amount Approved	83 823*	83 823

<sup>\*</sup>Note: USD 83 823 is 46 percent of the whole cost of the project. Remaining amount of USD 97 973 will be provided by the FAO to meet the full cost of the project. PUNO stands for Participating UN Organization, which is FAO that will get the residual funds.