REDD+ Country Participant Completion Report for the Readiness Fund of the FCPF

Submission Date: 09-07-2023

Project Name	**PAKISTAN: REDD+ READINES PROJECT**
Country	PAKISTAN
Implementing Agency	MINISTRY OF CLIMATE CHANGE
Grant Objectives	To strengthen the capacity to monitor deforestation and reduce emissions through a National REDD+ Strategy
Original Amount (US$)	3.8 million
Revised Amount (US$)	7.814 million
Actual Disbursed (US$)	6.965 million
Effectiveness Date	04-05-2015
Original Closing Date	30-06-2018
Actual Closing Date	30-11-2022

1. Overall Outcome and its Sustainability

Pakistan initiated implementing Readiness Grant of USD 7.814 million from the Forest Carbon Partnership Facility of the World Bank for readiness preparations in 2015 and completed all the requirements in 2022 on four components: (i) Readiness Consultation and Organization, (ii) Preparation of National REDD+ Strategy, (iii) Forest Reference Emission Level, and (iv) National Forest Monitoring System and Safeguard Information System. The status of grant activities is shown in Annex-I.

The overall objective of the Grant was to strengthen the capacity of the Recipient to monitor deforestation and reduce forest and land use change related greenhouse gas emissions through a socially, environmentally, and technically sound national REDD+ strategy.

In terms of overall outcome, the FCPF's Readiness grant has played a catalyst role towards laying the foundation of REDD+ processes in the country. The grant has facilitated notification of national definitions of "forests" and forest degradation which were applied to undertake national level historical landcover assessments carried out for the periods from 2004- 2016 and 2016-2020. The National Forest Monitoring Standards have been adopted for forest monitoring together with development of dedicated forest monitoring portals at the national and provincial levels for hosting of generated forest monitoring data. The capacities of the provinces/territories have been developed through training and provision of required forest monitoring equipment.

The grant has led to setting up the strategic directions and priorities for REDD+ implementation in the form of National REDD+ Strategy and Sub-national REDD+ Action Plans. These are based on in-depth review and analysis of existing institutional arrangements and stakeholder participation mechanisms, policies and assessment of direct and indirect drivers of deforestation and degradation. The grant has facilitated towards establishment and demonstration of scientific standards for forest monitoring, land use changes and social safeguards.

The grant has also supported building awareness and capacity of various stakeholders in various aspects of REDD+ implementation and forest carbon financing. Forest carbon has been integrated in the national/sub-national policies and laws as the new commodity. Through enhanced awareness and institutional capacities, a lot of interest has been generated at the national and sub-national level with most of the sub-national forestry departments taking keen interest towards development of forestry carbon projects. For example, the Indus Delta Capital Mangrove Project has been registered as the first successful negotiated blue carbon transaction in the world.

To ensure sustainability of REDD+ processes at the national and sub-national levels, the grant has supported establishment of REDD+ institutional set ups. National REDD+ Office is part of the functional responsibilities of the forestry wing of the Ministry of Climate Change at the federal level and the provincial REDD+ Offices embedded within the functional responsibilities of the provincial/territory forestry departments.

The individual project outcomes are discussed in the following sections and their overall progress is ranked on a four-color 'traffic light' scale: Green for significant progress; Yellow for progressing well but further development required; Orange for further development required; and Red for not showing any progress yet, in line with the Forest Carbon Partnership Facility's self-assessment framework.

2. Outcome of each Readiness Grant Activity

2.1 Component 1: Readiness Organisation and Consultation:

This component provides an overall assessment of national REDD+ management arrangements for implementation of REDD+, stakeholders engagement, integration of REDD+ into broader national or sector strategies, management of inquiries, complaints and potential grievances related to implementation of REDD+ activities and information sharing. Overall, national progress under the component 1 is rated as GREEN in view of significant progress made as discussed in the following paras.

At national level, the Ministry of Climate Change supported by the Office of Inspector General Forests as the National Focal Point for REDD+ and National Focal Point for UNFCCC is the focal agency for REDD+. It continues to discharge the functions of National REDD+ office to provide technical assistance. It is supported by the four notified National Thematic Working Groups, and for facilitating national coordination for REDD+ implementation. At sub-national levels, a notified the provincial REDD+ Focal Points have been designated in each province/territory.

For stakeholder coordination and engagement, a multisectoral National Steering Committee on REDD+ has been notified which is led by the Secretary, Ministry of Climate Change whereas, at the provincial/sub-national level, multi-stakeholder Provincial REDD+ Management Committees have been notified in each of the provinces/territory for stakeholder coordination and engagement. Since its constitution, 12 meetings of NSC have been held.

Table 1: Coordination Meetings and Sessions (Participation Details)

Coordination meetings	No.	Participants
NSC meetings (Multistakeholder)	12	340
PRMC Meetings (Multi-stakeholders)	12	113
Technical meetings of WGs	10	25
Community Consultations (local forest communities and women groups, tourists)	32	911
Sub-Total	**64**	**1083**

The relevant stakeholders at the national and sub-national levels were engaged in participatory decision-making, designing of national and sub-national REDD+ priorities and action plans, development and implementation of national forest monitoring standards, development national system for monitoring of social and environmental safeguards, and awareness and capacity building.

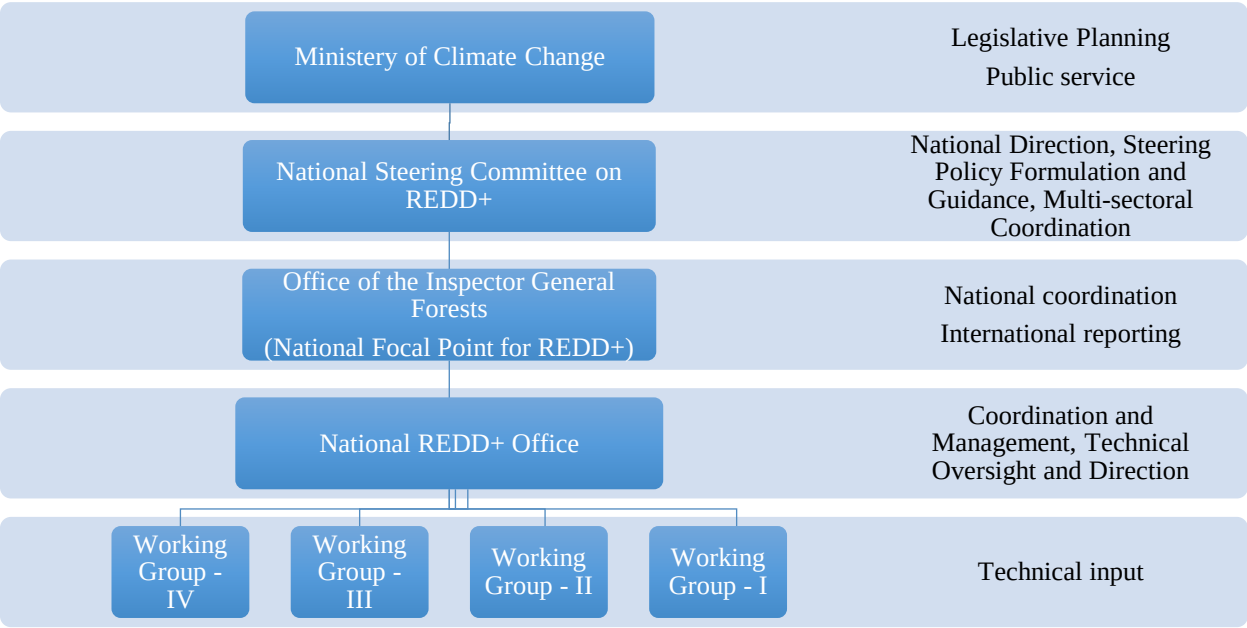

Figure 1: Organogram of the National REDD+ Institutions and Decision-Making Bodies

For communication and knowledge sharing, a Strategic Communication Plan has been developed and implemented. Various communication channels, tools, and approaches have been employed for wider outreach, including workshops, print and electronic media, online platforms, social media, knowledge products, and REDD+ internships and website. The outreach involved more than 2189 participants, covering wide range of stakeholders, including policymakers, technocrats

and central and local administrative authorities, local communities, journalists, religious and political leaders, general public, academia, non-governmental and civil society organizations.

More than 150 other consultative sessions were held to ensure stakeholders engagement during preparation of National REDD+ Strategy (NRS), Strategic Social and Environmental Assessment (SESA), Safeguard Information System (SIS), National Forest Monitoring System (NFMS), Forest Reference Emission Level (FREL), Feedback Grievance and Redressal Mechanism (FGRM), Payment for Ecosystem Services (PES) and other ongoing national and sub-national analytical studies including Provincial REDD+ Action Plans (PRAPs), Participatory Forest Management Plans (PFMPs) etc.

Table 2: Activities under REDD+ Awareness and Outreach

Activities under REDD+ Awareness and Outreach	**No of Participants**		
	Male	**Female**	**Total**
Coordination meetings with Provincial Forest Departments	22	4	26
Consultative meeting for parliamentarians.	24	9	33
Twelve Training of Trainers (NFI, SLMS & SIS)	154	37	191
Ten Trainings/ consultative workshops for stakeholders, women groups & Journalists	235	76	311
Two Exposure visits of Forest Department Officials and journalists	70	15	85
SDPI Panel Discussion on REDD+	40	11	51
Multi-stakeholder Outreach Workshop	53	7	60
Public Awareness raising seminars (GB, PES, Urban Forestry, Pre-COP 23)	192	46	238
Awareness Raising Campaign (World Environment Day)	65	5	70
National Internship Program	31	39	40
Sub-Total	**857**	**249**	**1106**

The key knowledge products (listed below) were developed under the project were printed and widely disseminated to relevant national stakeholders and are uploaded on the national REDD+ website www.redd-pakistan.org.

i. Forest Reference Emissions Level
ii. National Forest Monitoring System
iii. National REDD+ Strategy
iv. Framework design of a safeguards information System
v. National Level Assessment of Demand and Supply of Forest Products and Services
vi. Report on Forestry Technical and Extension Systems
vii. REDD+ Gender Action Plans – National Synthesis Report
viii. Assessment of Private Sector Engagement and potential of Carbon Trading Mechanisms and Markets for Pakistan
ix. Payment for Ecosystem Services
x. Miscellaneous (posters, info-graphs/booklets, stickers, paper bags, writing pads).

2.1.1 Planned Steps for Sustainability:

i. A National Landscape Restoration plan has been developed which integrates Strategic Actions for implementation.

ii. Provincial REDD+ Action Plans have been developed which address identified drivers of deforestation and degradation at provincial/sub-national level.

iii. National and sub-national forest restoration initiatives have been developed and implemented for restoration of degraded forests and enhancing tree cover across the country. These include, National Green Pakistan Programme/Ten Billion Tsunami Programme, Billion Tree Afforestation Project in KP and Mangrove Restoration Programme in Sindh.

iv. Partnering in regional forest restoration initiatives such as, Middle East Green Initiative (MGI) and Forest Climate Leadership Programme.

v. Feasibility studies and project design documents have been formulated or are under process for forest landscapes in Sindh, GB and KP.

vi. Continued outreach, capacity building and exposure of forestry officials in forest landscape restoration approaches through domestic or international investment.

2.2 Component 2: Preparation of National REDD+ Strategy:

This component deals with preparation of National REDD+ Strategy. NRS was prepared based on analytical studies and extensive stakeholder consultation. For this purpose, multiple analytical studies were conducted for (i) assessment of drivers of deforestation and forest degradation (ii) development of strategic options, (iii) assessment of land tenure and natural resource rights (as part of SESA to inform NRS), (iv) assessment of existing feedback and grievance redressal mechanisms; (v) assessment of legal, institutional and policy framework for REDD+; (vi) analysis of legal, institutional and governance capacity to address safeguards, (vii) strategic environmental and social assessment (SESA) and; (viii) environmental and social management framework. The overall national progress ranking for component is rated as GREEN**.**

The National REDD+ Strategy (NRS) and Implementation Framework has been uploaded on UNFCCC website[1]. NRS has been developed on the basis of multiple analytical studies and consultations on land use changes and trends to identify and prioritize the drivers of deforestation and forest degradation and analyses the underlying causes in terms of governance issues and weak enforcement of forest laws and policies and land tenure issues. NRS has identified conversion of forest land for the purpose of commercial agriculture and infrastructure developments (settlement, roads and tourism) and surface mining as the key drivers of deforestation; and unsustainable cutting of trees for fuelwood and construction, subsistence agriculture, un-controlled and over livestock grazing, forest fires, infectious diseases and un-sustainable tourism as the key drivers of degradation.

[1] [1] https://redd.unfccc.int/submissions.html?country=pak

For the assessment of land use and trends, several satellite-based studies that were conducted between 1992 and 2012 were reviewed to understand spatial distribution of the drivers of deforestation and degradation. Policy analysis focused on historical review of forest policies which mostly revealed revenue-oriented focus of forest management rather focusing on forest ecosystem services. The policy analysis was done to understand cross-sectoral policies contexts and land tenure issues. The National Climate Change Policy (2012), The National Climate Change Act (2017) and National Forest Policy (2017) were the most important nationally approved documents that recognised the importance of forest for climate change and livelihoods. REDD+ has been identified as one of the potential Nbs in Nationally Determine Contributions (NDC).

Based on feasibility analysis, NRS has identified six strategic priorities along with ten supporting policy and measures based on institutional assessment, needs of the forest dependents and

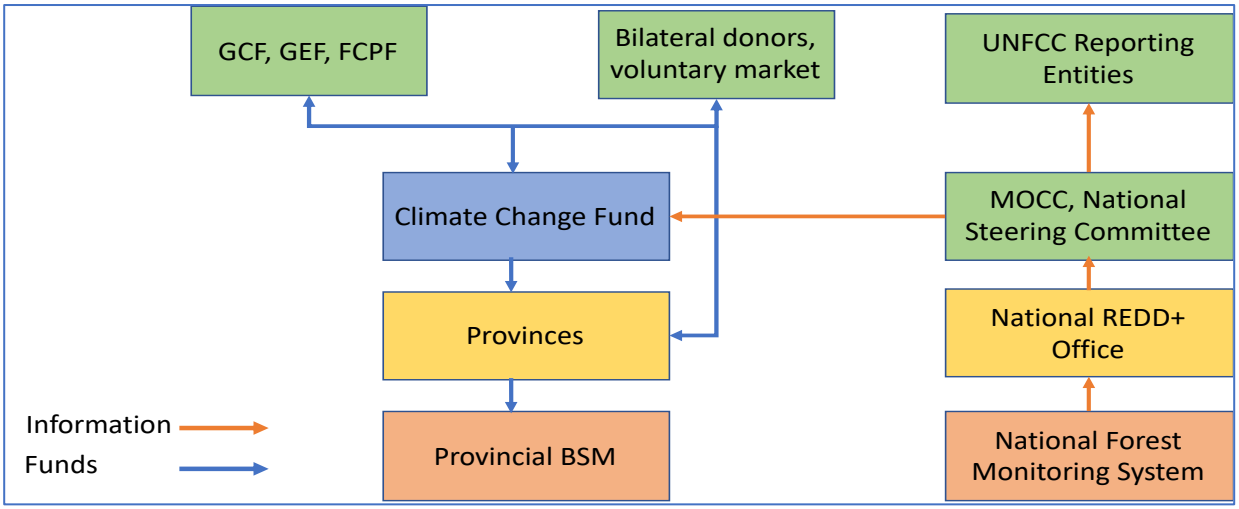

Figure 2: Schematic Diagram of REDD+ Benefit Sharing Flows

analysis of direct and indirect drivers of deforestation and forest degradation, taking into considerations the livelihood needs of local communities, climate change mitigation and adaptation, and gender mainstreaming in forestry sector. The strategic options which include, restoration, reforestation and afforestation; sustainable forest management; payment for ecosystem services; efficient alternative energy sources; silvo-pastoral sustainable practices; agroforestry and sustainable tourism and eco-tourism. The strategy also provides a framework for benefit sharing mechanism (Fig. 2).

The Environmental and Social Management Framework (ESMF) has been developed with general principles and criteria for policy and programme design and investment selection to manage the social and environmental impacts of REDD+ strategy implementation and ensure compliance with UNFCCC REDD+ Safeguards and FCPF guidelines[2]. The strategy recognizes women's contribution to forestry activities and proposes several actions for gender mainstreaming in forestry sector and REDD+.

2 Common Approach, p. 8, para. 23 (https://forestcarbonpartnership.org/system/files/documents/FCPF%20Readiness%20Fund%20Common%20Approach%208-9-12_0.pdf)

To support implementation of strategic options at the provincial levels, sub-national REDD+ Action Plans and pilot management plans for 15 forests sites were developed to identify the deforestation and forest degradation explicitly linked to the local contexts based on more in-depth participatory analysis using the problem-tree-solution approach.

Private sector has been recognized as an important player in REDD+ activities both on supply and demand sides. Pursuant to Paris Agreement, many of leading private sector organization around the globe have pledged to pursue net zero goals by 2050. As such, NRS has identified private sector as one of the financing options to support implementation of forest conservation and restoration activities. In line with, it the readiness grant support in conduct of assessment of private sector engagement and potential of carbon trading mechanisms and markets for Pakistan. These studies have identified potential opportunities and entry points for engaging with domestic and international private sector players in emission reduction projects or offset projects. This may be done through partnership agreements with forest carbon right-holders involving both the government and local communities having stakes in the respective forests.

Forest restoration as an integral part of NRS and REDD+ has been well integrated into national and sub-national priorities and policies, such as National Forest Policy, National Climate Change Policy, Natural Capital Accounting and NDC. At the national and provincial level, dedicated allocations have been made for mega restoration of forest initiatives such as, Green Pakistan Programme/Ten Billion Tree Afforestation Project, Billion Tree Afforestation Project (BTAP) and large-scale restoration of mangroves along the coast.

Feasibility studies and project design documents of forest carbon offset projects in Sindh and GB have been completed. The province of KP is also in process of undertaking feasibility of forest carbon projects. The Indus Delta Blue Carbon Project has been registered as the first successful carbon credits transaction of mangrove carbon, securing between $10 and $20 million for 1-5 million TCO_2e in December, 2022. The Indus Delta Blue Carbon Project aims to restore 350,000 ha of mangroves over the period of 60 years in coastal districts of Sindh province through multi-phased public private partnership. The Phase-1 aims at restoration of 224,997 ha of degraded land through large scale reforestation of which 75,000 ha was restored by 2020 with mangrove plantations. The project has been validated for the total expected emissions reduction of 127 million TCO_2e over its life time.

With financial support from FAO and technical support of Pakistan Forest Institute, Peshawar, National Forest Landscape Restoration Plan has been developed for implementation of forest landscape restoration approaches. The World Bank also intends to support the Government towards preparation of Landscape Governance/Restoration Framework with forestry included as an integral component of Nature-based solutions.

2.2.1 Planned Steps for Sustainability:

i. Organize a Roundtable to launch National Forest Landscape Restoration Plan, involving donors and project development partners. Shortlist potential proposal concepts of forest landscape restoration aligned to investment priorities of the donors.

ii. Continue to extend technical support to provinces/territories for identification of forest restoration and forest carbon projects.

iii. Develop framework for engagement of local and international private sector in forest carbon trading/offset projects.

iv. Further strengthen capacities of provincial forestry departments and other stakeholders in REDD+, forest restoration and access to forest carbon markets, and aligning forest policies and processes to strengthen benefit sharing and carbon rights.

2.3 Component 3: National Forest Reference Emission Level:

The overall national progress ranking for component 3 is rated as GREEN in view of significant progress made.

This component deals with preparation of National Forest Monitoring System. NFMS and MRV procedures have been finalized at National Level, including institutional arrangements and methodological and implementation frameworks supported by guiding training manuals for SLMS, NFI and GHG-I. The project supported towards defining national protocols for satellite-based land cover assessment and national forest inventory. For this purpose, national definition of forests and forest degradation were adopted to form the basis for assessment of forest cover and carbon stocks and emissions from deforestation and forest degradation.

The developed methodological approach consistent with the UNFCCC/ IPCC guidelines were demonstrated for construction of FREL using step-wise improvement approach. The unified Emission Factors (EF) initially developed on Pilot National Forest Inventory (NFI) were further improved through a more intensive data collection at sub-national levels for development of EF by major forest types of the country. The carbon stock assessment was carried out using Tier 2, whereas a combination of approach 2 & 3 were used for deriving Activity data using land use Transition Matrix and spatially explicit information.

Pakistan developed its first ever scientifically developed Forest Reference Emission Level (FREL) for deforestation based on historical assessment of the period 2004 and 2012 (the reference period) which has been published at UNFCCC's REDD+ web platform[3]. The FREL was assessed by UNFCCC and sets a benchmark of annual emissions from deforestation corresponding to 946, 653 tCO_2 eq/ year (gross emissions 2.32 ± 2.564 million tons of CO_2-eq over the period of 2004-2008 and 5.25 ± 4.375 million CO_2 eq. tons over the period of 2008-2012). In line with intended improvement plan, a further national landcover assessment has been completed for the years 2016 and 2020 using approach 2 or 3 to land representation from the 2006 IPCC Guidelines to present correctly the proportion of the different land uses (including temporarily unstocked areas) post deforestation and the use of more accurate EFs to estimate emissions. The latest assessment also covers first ever scientific assessment of forest degradation, removals and enhancement activities covering the period from 2016 and 2020. The report has estimated

3 https://redd.unfccc.int/files/1._unfccc_frel_pakistan__final_with_proofread_-final.pdf.

emissions from degradation to be 49.12 $MtCO_2e$ and the removals from enhancement through reforestation/afforestation and removals from improvement in forest cover density of existing forest were estimated to be 1.57 $MtCO_2e$ and 30.73 $MtCO_2e$ during the period 2016-2020.

Technical capacities of the national and sub-national level stakeholders, working group members and institution have been through several national and international training and exposure related to Satellite Land Monitoring System (SLMS) and National Forest Inventory (NFI), GHG-I, carbon accounting, nursery raising, Safeguard Information System (SIS) and Payments for Ecosystem Services (PES) which benefited 688 participants, of which, 573 were male and 115 were female participants.

In addition, a comprehensive national level assessment of demand and supply of forest products and services supported in quantifying the contribution of forestry sector to national economy and livelihoods of the local community. The study assessed that over all the contribution of forestry goods and services to the GDP was assessed to be 11.48 per cent. The total wood supply in the country is estimated at 52 million m^3, out of which timber is 29% (15 million m^3) and fuelwood is 71% (37 million m^3). The government managed forests provide 12% and private land supplies 88% of the total wood. Public forests provide 2% of timber and 16% of the fuelwood requirements in the country. On the other hand, plantations on private lands provide 98% of the timber demand and 84% of fuelwood demand. Per capita consumption of timber is estimated at 0.084 m^3 per year and fuelwood consumption is 0.240 m^3.

2.3.1 Planned Steps for Sustainability:

i. Develop updated national FREL based on the latest assessment covering both deforestation and forest degradation and removals for assessment by UNFCCC.

ii. Evaluate country performance against the set bench marks for deforestation and forest degradation.

2.4 Component 4: National Forest Monitoring System and Safeguard Information System:

The overall national progress ranking for this component is rated as **YELLOW** in view of substantial progress made under this component.

The objectives of the NFMS are (i) to provide a central repository for all information pertaining to the National REDD+ Programme, including dimensions of economy and society, biophysical data on forest and forest land resources, emission, and removal of greenhouse gases (GHG) as well as operational aspects.

The NFMS designed to support Measurement, Reporting and Verification (MRV) and Monitoring functions. It is guided by Decisions (4/ CP.15, 1/CP 16 – Para 71C) and 11/ CP.19) of United Nations Framework Convention on Climate Change (UNFCCC) and consists of a combination of

remote sensing and field forest carbon inventory and monitoring indicators for assessing carbon and non-carbon benefits.

The project has facilitated towards defining national forest monitoring standards. These national standards involve adopted protocols, methodological processes and responsible institutions for satellite-based land cover monitoring and field-based forest carbon inventory, Multiple Benefits Impacts and Governance Safeguards (MBIGS) and forest database management. NFMS design is guided by Decisions (4/ CP.15, 1/CP 16 – Para 71C) and 11/ CP.19) of UNFCCC. In addition, Safeguard Information System (SIS) along with a dedicated website (www.reddpakistansis.com) has also been developed to provide easy access to the information on Cancun safeguards. Further, in accordance with the FCPF guidelines and international best practices, a systematic FGRM procedure has been adopted that consists of four simple steps i.e. Receipt and registration, Investigation, Resolution and Monitoring of the resolution of complaints.

As part of the national standards, the national definitions of "Forest" [4] and "Forest degradation" were developed and adopted with stakeholder consensus. The adopted national standards were demonstrated for the land cover assessments for the periods 2004 and 2012 and 2016 and 2020. A landmark contribution has been development of District wise LULC and change detection maps (Atlas) and development of new allometric equations for 19 forest tree species. The data so generated is being used for preparation of national GHG inventories.

Field manuals for SLMS, NFI and GHG have been prepared and disseminated for future use together with capacity building of forest officials at the national and sub-national levels. For transparent management of data, dedicated national and sub-national web portals have been developed to act as repository of data. The web addresses of synchronized national & sub-national forest monitoring portals are as under:

- www.nfmspak.org
- www.gbfmspak.org
- www.kpfmspak.org
- www.sindhfmspak.org
- www.balfmspak.org
- www.ajkfmspak.org
- www.punjabfmspak.pk

Furthermore, a National REDD+ Registry[5] has been prepared to record data and information on Forest Carbon/REDD+ projects for tracking of claimed, attributed, registered and certified emission reduction units or carbon credits. The National REDD+ Registry has been linked to NFMS. In the medium and long term, the registry will provide information to evaluate the effectiveness of REDD+ projects and/ or intervention strategies.

4 "A minimum area of land of 0.5 ha with a tree crown cover of more than 10 % comprising trees with the potential to reach a minimum height of 2 meters. This will also include existing irrigated plantations as well as areas that have already been defined as forests in respective legal documents and expected to meet the required thresholds as defined in the national definition for Pakistan." (https://redd.unfccc.int/files/1._unfccc_frel_pakistan__final_with_proofread_-final.pdf. Pp20)

5 https://www.nfmspak.org/reddplusregistry

The social and environmental risks of strategic options presented in NRS was undertaken through a detailed Strategic Environmental and Social Assessment (SESA) study, in addition to gaps assessment of existing policies, regulations, procedures, and institutional structures related to environmental and social safeguards[6] requirements under UNFCCC and FCPF. The key social risks were identified to be limitations/ exclusion of right holders (mostly poor communities), elite capture due to insecure land tenure, gender inequalities, social conflicts and forcible displacements. The environmental risks included loss of biodiversity due to introduction of monoculture and introduction of exotic/ alien species. A dedicated website (www.reddpakistansis.com) in Urdu and English languages is operational to provide access to the information on Pakistan's REDD+ related safeguards.

The existing policies, regulations, procedures, and institutional structures that support implementation of environmental and social safeguards were analysed through complementary assessments [7] involving multi-sector consultations at national and provincial levels for prioritization of risks and the loopholes in laws, policies and existing regulations. The analysis revealed that Pakistan's Policies Laws and Regulations (PLRs) are largely consistent with the UNFCCC REDD+ safeguards[8].

The NFMS design also integrates institutional arrangements for operational aspects of NFMS with defined mandates, responsibilities for collection, management, dissemination, hosting and ownership of data, quality control, data sharing and coordination of the key relevant national and sub-national institutions.

For sustainability of NFMS, the project has supported institutional strengthening of sub-national forestry departments through provision of various GIS and forest inventory and monitoring equipment to develop or strengthen forest monitoring functions.

2.4.1 Planned Steps for Sustainability:

i. Updating of National Forest Reference Emission level based on latest data covering forest degradation and removals and improved EF.

ii. Regular updating of national and sub-national web portals and National REDD+ Registry.

iii. Further continued capacity building of provincial forest officials in NFI, SLMS and SIS.

iv. Ensure integration of national standards in future land cover assessment and national forest carbon inventories, including data collection on SIS and MBIGS.

6 MoCC (2017), Assessment of Historic Environmental and Social Issues in the Forest and Land Use Sector' and 'Analyses of Legal and Institutional and governance capacity to address safeguards in Pakistan

7 MoCC (2017), Assessment of Historic Environmental and Social Issues in the Forest and Land Use Sector' and 'Analyses of Legal and Institutional and governance capacity to address safeguards in Pakistan

8 MoCC (2018), Analyses of legal and institutional capacity to address safeguards in Pakistan

3.0 Summary of Lessons Learnt During Readiness Grant Implementation:

Considering the overall project operations following is a summary of key positive and negative lessons learnt:

i. For the first time scientific national forest monitoring standards were developed and adopted and applied for landcover monitoring and carbon stock assessment. These included development of national definitions on “forest” and “forest degradation” and nationally adopted methodologies and manuals.

ii. The significant amount of reliable scientific data on forest cover, land use, forest carbon stocks, emissions from deforestation and forest degradation, forest ecosystem services and institutional aspects of forest management has been generated to support future planning and decision-making related to forestry sector.

iii. The capacities and awareness of national and provincial stakeholders on the REDD+ concept and technical aspects of its implementation have been significantly strengthened.

iv. A great deal transformation in conventional thinking of forest mangers has been evident from growing interest towards managing natural forests for ecosystem services and climate mitigation values of carbon stored in forests. This has led to designing and feasibility studies to develop forest carbon projects under public-private partnership.

v. There has been growing interest of domestic private sector organizations to pursue net zero goals through investment in forest carbon offset projects. These private sector organisations include, Engro, Shell, Mitsubishi, Hubco and textiles.

vi. REDD+ related institutional arrangements have been incorporated in the administrative structures and functions of the sub-national forestry departments with dedicate REDD+ units and staff.

vii. Web portals for hosting of forestry databases have been established at the national and sub-national levels, with defined mandates, and data-sharing agreements to act as repositories of previously dispersed forestry data.

viii. Groundwork for landscape restoration has been laid to carry forward and develop an enduring investment program/framework of action for landscape restoration priorities in consultation with the federal and provincial stakeholders.

ix. Project operations suffered from delays due to some unforeseen circumstances such as, COVID-19 Pandemic and unfortunate fatal accident to the staff of WWF-Pakistan which was engaged in forestry data collection resulting in loss of precious lives of five team members. However, the Project still achieved stated objectives and was able to complete the deliverables.

4.0 Project Cost by Readiness Grant Activity

Activities	Amount at Approval (US$)	Actual at Project Closing (US$)	Percentage of Approval
Component 1		0.623 million	
Component 2		2.868 million	
Component 3		1.462 million	
Component 4		2.012 million	
Total	**7.814**	**6.965 million**	**89.135%**

ANNEX-I: STATUS OF ACTIVITIES UNDER REDD+ READINESS GRANT AGREEMENTS

PHASE I (Initial funding 2015-2018) : Activities as listed in the grant agreement

Activity No.	Name of Activity	Status
1.1	Conducting analytical work and developing national REDD+ strategy	completed
1.2	Conducting SESA, preparing an ESMF, and assessing existing feedback and grievance redress mechanisms ("FGRM") and developing a FGRM framework for REDD+	completed
2.1	Supporting the development of reference emissions levels	completed
2.2	Designing a national measurement, reporting and verification system for emissions reduction and a monitoring system for non-carbon benefits	completed
3.1	Supporting Inspector General of Forests Office in managing and implementing the REDD+ Preparation Activities	completed
3.2	Building capacity of the relevant institutions involved in the implementation of the REDD+ Preparation Activities	completed
3.3	Conducting consultations on REDD+ relevant Issues.	completed
4.	Designing a REDD+ payment for environmental services scheme (PES) in a province	completed

PHASE II (additional funding 2018-2022): Activities as listed in the grant agreement

Activity No.	Name of Activity	Status
1.1	National REDD+ readiness coordination and mechanism: (a) Organize meetings of the National Steering Committee and the REDD Working Groups; and (b) assess forest technical and extension system to enhance institutional competency.	completed
1.2	Stakeholder engagement and communication and dissemination: (a) develop training manuals on REDD+, including REDD+ strategy, safeguards, Forest Reference Level (FRL) and Measurement, reporting and verification (MRV); (b) Consult with provincial governments and recommend concrete actions to integrate the most pertinent recommendations from Readiness studies into existing forestry laws and policies at national and provincial level; and (c) Publication and dissemination of findings from REDD+ Readiness studies.	Activity 1.2 (a & c) completed.

1.3	Capacity building and training for REDD+ implementation: (a) continue national internship program on REDD+ for young professionals; (b) participate in relevant international workshop and training; (c) national exposure visits for a certain number of officials from Sindh, Punjab, Azad Jammu and Kashmir (AJK), Baluchistan and Khyber Pakhtunkhwa (KP) about their Billion Tree Tsunami and REDD+ work; and (d) provision of training and capacity building activities including: (i) REDD+ global context and Carbon accounting; (ii) forest inventory, both field- and satellite-based; (iii) technical forest (plantation technique, nursery raising); and (iv) REDD+ Safeguards.	completed
2.1	Assessment of Land Use, Land Use Change Drivers, Forest Law, Policy and Governance: (a) impact assessment of leasing forest land for other purposes and recommend policy measures with a focus on Punjab and Sindh Provinces; (b) undertake a robust, national level assessment of demand and supply of forest products and services, and quantify contribution of forests to rural livelihood and national economy; (c) compile provincial level forest information data, where available, and generate new data set from satellite image analysis; and (d) translation, digitization and online disclosure of key forestry documents, including laws, policies, management plans, national and provincial level research reports.	Activities 2.1 (b, c & d) completed. However, activity 2.1 (a) was dropped after consultation with the World Bank as no firm qualified. Rebidding within the timeframe was not possible. World Bank concurred.
2.2	REDD+ Strategy Options: (a) Assess opportunity cost of REDD+ in Pakistan; (b) prepare fifteen (15) model participatory forest management plans in consultation with local communities; (c) prepare six (6) provincial REDD+ Action Plans based on National REDD+ Strategy for Punjab, Sindh, Baluchistan, AJK, Federally Administered Tribal Areas (FATA) and Gilgit-Baltistan; and (d) assess prospects of resin-tapping, including technical guidelines and fire and disease protection and marketing.	Activities 2.2 (b,c & d)completed. However, Activity 2.2 (a) was dropped after consultation with the World Bank as no firm qualified. Rebidding within the timeframe was not possible. World Bank concurred
2.3	REDD+ Implementation Framework: (a) assessment of private sector engagement in forestry sector and REDD+ and measures to promote such engagement; and (b)	completed

	assessment of seed and seedling supply system for forest plantation, including tissue culture and seed bank.	
2.4	Social and Environmental Impacts during Readiness Preparation and REDD-plus Implementation: (a) prepare a REDD+ Gender Action Plan (GAP); and (b) assessment of carbon rights in various types of forests based on legal classification.	completed
3.1	Design, develop and operate official forest management system web portals in each provinces and territories to be linked with NFMS web portal.	completed
3.2	Develop and strengthen provincial NFMS and MRV system.	completed
3.3	Procure equipment for forest inventory and monitoring (laser vertex, densitometer, hypsometer, GIS plotters, laptops – seven pieces each – and 14 GPS).	completed
4.1	Hire staff to support National REDD+ Office, including Readiness Preparation Activities coordinator, financial management specialist, procurement specialist, 2 REDD+ associates).	completed
4.2	Hire three technical specialists/experts to support National REDD+ Office.	completed
4.3	Financing of Operating Costs.	completed
4.4	Maintain REDD+ website.	completed