

2/25/2022

TERMINAL EVALUATION

Generating Global Environmental
Benefits from Improved Decision-
Making Systems and Local Planning
in Pakistan

Project title	Generating Global Environmental Benefits from Improved Decision-Making Systems and Local Planning in Pakistan
UNDP PIMS ID	4939
GEF ID	5326
TE time-frame	26 Oct 2021 to 10 Feb 2022
Date of TE Final Report	25-02-2022
Region/ Country	RBAP / Pakistan
GEF Focal Area	Multi-focal area
GEF Strategic programme	CD2 To generate, access and use information and knowledge CD3 To strengthen capacities to develop policy and legislative frameworks
Executing Agency (Implementing partner)	Ministry of Climate Change, Government of Pakistan (Previous called Climate Change Division)
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i. Acknowledgements

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ii. Acronyms and Abbreviations

10BTTP	10 Billion Tree Tsunami Project
AKRSP	Aga Khan Rural Support Organization
APO	Assistant Project Officer
APR	Annual Project Report
AWP	Annual Work Plan
BS	Bureau of Statistics
BUIITEMS	Balochistan University of Information Technology, Engineering and Management Sciences
CCCD	Crosscutting Capacity Development
CCD	Climate Change Division
CDWP	Central Development Working Party
CPEC	China Pakistan Economic Corridor
DES	Department of Environmental Sciences
ECCU	Environment and Climate Change Unit
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
FD	Forest Department
FJWU	Fatima Jinnah Women University
GGEB	Generating Global Environmental Benefits
GoP	Government of Pakistan
Govt	Government
HACT	Harmonized Approach to Cash Transfers
ICT	Islamabad Capital Territory
IER	Initial Environmental Review
IR	Initial Review
IUCN	International Union for Conservation of Nature
KPK/ KP	Khyber Pakhtunkhwa
MoCC	Ministry of Climate Change
MoPD&R	Ministry of Planning, Development & Reforms
MoU	Memorandum of Understanding
MSU	Management Support Unit
NBC	National Bio-safety Centre
NDCs	Nationally Determined Contributions
NEAP	National Environment Action Plan
NED University	Nadirshaw Edulji Dinshaw University
NEMIS	National Environmental Management Information System
NFR	Note for Record
NGOs	Non-Governmental Organizations
NIM	National Implementation Modality
NIPA	National Institute of Public Administration
NPC	National Project Coordinator
NPD	National Project Director
P&D	Planning and Development
PBS	Pakistan Bureau of Statistics
PC-1	Planning Commission Form-1 (Government project document template)
PFI	Pakistan Forest Institute

PGDP	Punjab Green Development Programme
PMU	Project Management Unit
PPMI	Pakistan Planning and Management Institute
PRF	Project Results Framework
ProDoc	Project Document
PSC	Project Steering Committee
QC/ QA	Quality Control/ Quality Assurance
RTC	Round Table Conference
SESP	Social and Environmental Safeguards Plan
SOE	State of Environment
TE	Terminal Evaluation
UNCBD	United Nation Convention on Biodiversity
UNCCD	United Nation Convention to Combat Desertification
UNDP CO	United Nations Development Country Office
UNFCCC	United Nation Framework Convention on Climate Change
UoP	University of Peshawar
WLD	Wildlife Department
WWF	World Wide Fund for Nature
NEMIS	National Environmental Management Information System
M&E	Monitoring & Evaluation
IA	Implementing Agency
EA	Executing Agency
EMIS	Environmental Management Information System
PMU	Project Management Unit
MoU	Memorandum of Understanding
NPD	National Project Director
IT	Information Technology
P&D Departments	Planning & Development Departments
NCS	National Conservation Strategy
NDMIS	National Disaster Management Information System
NGOs	Non-Government Organisations
REDD+	Reducing Emissions from Deforestation and Forest Degradation Plus
NEAP	National Environment Action Plan
BAP	Biodiversity Action Plan
EAD	Economic Affairs Division
MEAs	Multilateral Environmental Agreements
SDPI	Sustainable Development Policy Institute
SPO	Strengthening Participatory Organizations
SDNP	Sustainable Development Network of Pakistan
NCSA	National Capacity Self-Assessment
COMSATS	Commission on Science and Technology for Sustainable Development in the South
NBC	National Bio-safety Centre
NCPC	National Cleaner Production Center
RTA	Regional Technical Advisor
LOA	Letter of Agreement
CSOs	Civil Society Organisations

1. Executive Summary (3-4 pages)

1.1 Project Information Table

Table 1: Project information table

Project Details	Project Milestones		
Project Title	Generating Global Environmental Benefits from Improved Decision-Making Systems and Local Planning in Pakistan (GGEB Project)		
UNDP Project ID (PIMS#)	4939	PIF Approval Date:	September 18, 2013
GEF Project ID (PMIS#)	5326	CEO Endorsement Date:	June 11, 2015
Atlas Business Unit Award #: Project ID:	00090330 00096147	ProDoc Signature Date (date project began):	March 9, 2016
Country:	Pakistan	Date project manager hired (Second NPM)	November 15, 2018
Region:	Asia Pacific	Inception Workshop date:	December 17, 2018
Focal Area:	Multifocal area (Cross-Cutting Capacity development)	Midterm Review completion date:	N/A
GEF Focal Area Strategic Objectives:	CD2 To generate, access and use information and knowledge CD3 To strengthen capacities to develop policy and legislative frameworks	Planned project closing date:	March 9,2019
Trust Fund:	GEF TF	If revised, proposed op. closing date:	09 March, 2022
Executing Agency/Implementing Partner:	Ministry of Climate Change (MoCC)		
Other Execution Partners:	Pakistan Bureau of Statistics (PBS), KP P&D, KP EPA, Punjab P&D, Punjab EPA, Provincial Forest, Agriculture and Mineral Departments of KP and Punjab, UoP and FJWU		
NGO/ CBO Involvement	WWF, IUCN, Media and Journalists groups as beneficiaries in trainings, workshops, visits and briefings		
Private Sector Involvement	Limited to roles as vendors/ contractors (especially for IT support)		
Financial Information			
PDF/PPG	at approval (US\$)		at PDF/PPG completion (US\$)
GEF PDF/PPG grants for project preparation	30,000		29,522.42
Co-financing for project preparation	Nil		Nil
Project	at CEO Endorsement (US\$)		at TE (US\$)
[1] UNDP contribution:	217,700		185,386
[2] Government:	722,350		89,926
[3] Other multi-/bi-laterals:	-		-
[4] Private Sector:	-		-
[5] NGOs:	-		-
[6] Total co-financing [1 + 2 + 3 + 4 + 5]:	940,050		275,312
[7] Total GEF funding:	995,500		844,829
[8] Total Project Funding [6 + 7]	1,935,550		1,120,141

1.2 Project Description (brief)

The UNDP-GEF project “Generating Global Environmental Benefits from Improved Decision-Making Systems and Local Planning in Pakistan (GGEB)” was designed as a three-year project building on the work of the National Environmental Management Information System (NEMIS) project of the Government of Pakistan, UNDP and the Netherlands. The project aims to develop a comprehensive environmental information management system that will enable informed policy making, planning and reporting on a consistent basis. As per original Project Document (ProDoc) the project’s start and end dates were January 2016 and Dec 2018, however due long delays the project’s start and end dates were revised as March 2019 to March 2022. The GGEB project is a medium sized project of the GEF-5 programming cycle. The total cost of the project is USD 1,935,550 out of which the GEF financing is USD 995,500 (cash), Government of Pakistan (GOP) financing is USD 722,350 (cash/ in kind), and UNDP’s financing is USD 217,700 (cash/ in kind).

The project’s overall goal is ‘Generating Global Environmental Benefits from Improved Decision Making in Pakistan’. Its specific objective is ‘to remove the barriers to environmental information management and mainstreaming global environment concerns into economic decision making’. The objective has two parts i.e., the first one is related to environmental information, and the other to employing this information for improved economic decision making. The project has two components of:

- a) establishing a robust environmental information management system; and
- b) stimulating commitments and filling gaps in capacities for integrating environment and development.

The project has three interrelated outcomes: 1). Regular availability of consistent and reliable environmental data; 2). A coordinated and robust environmental information management system, and; 3). Enhanced commitment and capacity for sustainable development planning and legislation. The project focus is targeted at the issues of biodiversity conservation, climate change and desertification with a view to enhance the implementation and reporting under the relevant multilateral agreements. Due to some contextual changes during the period between March 2016 (signing of the project document) to March 2018 (approval of the Planning Commission Form-1 (PC-1)) the project document was fine-tuned in line with the contemporary national context. Accordingly, during the inception phase, some changes were made at the output level and the activities were tuned to the changed context while the outcomes and their associated indicators were kept unchanged. Following outputs and targets have been adopted from the inception report, addendum to the project document and revised project result framework.

1.3 Evaluation Ratings Table

Table 2: Evaluation rating table

1. Monitoring & Evaluation (M&E)	Rating
M&E design at entry	5 (S)
M&E Plan Implementation	4 (MS)
Overall Quality of M&E	4 (MS)
2. Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	
Quality of UNDP Implementation/Oversight	5 (S)
Quality of Implementing Partner Execution	4 (MS)
Overall quality of Implementation/Execution	4 (MS)
3. Assessment of Outcomes	

3.1 Outcome-1	
Relevance	4 (MS)
Effectiveness	4 (MS)
Efficiency	5 (S)
Overall outcome-1	4 (MS)
3.2 Outcome-2	
Relevance	5 (S))
Effectiveness	4 (MS)
Efficiency	4 (MS)
Overall outcome-2	4 (MS)
3.3 Outcome-3	
Relevance	5 (S)
Effectiveness	5 (S)
Efficiency	4 (MS)
Overall outcome-3	5 (S)
Overall Project Outcome Rating (Outcome-1, 2 and 3)	4 (MS)
4. Sustainability	
Financial sustainability	3 (ML)
Socio-political sustainability	4 (L)
Institutional framework and governance sustainability	2 (MU)
Environmental sustainability	4 (L)
Overall Likelihood of Sustainability	3 (ML)

1.4 Concise summary of findings, conclusions and lessons learned

Project Design/Formulation, implementation

From design point of view the GGEB project is well constructed building on the issues such as lack of a robust Environmental Management Information System (EMIS), and gaps in capacities and awareness for mainstreaming environmental consideration in development. However, the project design is too much dependent on the work of the NEMIS and Geomatic project, which faced sustainability issues. The process of development and approval of PC-1 mainly resulted in long delays during the initial stages of the project. Hiring and re-hiring of key staff during the initial stages of the project also contributed to delays in implementation. The changes and adjustments made in the project outputs and activities, and the management arrangements were mostly appropriate however some gaps were found especially in the management arrangements; lack of clarity regarding the project positions of component coordinators and the IT experts with the project component leads; no component implementation and coordination committee provided at the federal level, and; no revised overall workplan and budget provided.

Generally, stakeholders' participation remained moderately satisfactory and confined to main IPs, line departments and academia. Other important stakeholders were only involved in training, consultation and awareness events. Participation of stakeholders in training, consultation and awareness events was good and encouraging. Good efforts were made to build partnerships especially with academia. Formal Memorandum of Understandings (MoUs) with key stakeholders at federal and provincial levels (to ensure active participation and ownership) were not signed. These were substituted by nomination of focal points from the implementing partners and their readiness for data collection and sharing during the coordination meetings.

Some issues and challenges were faced by the project management. These included minimum staff at the Project Management Unit (PMU), lack of clarity regarding GoP procedures for the implementation of NIM projects in Pakistan, the Covid-19 pandemic, frequent changes of National Project Directors (NPDs), high turnover of the focal points and delays in transfer of advances due to audit observations (mostly related to other projects of MoCC during 2021). Response to these issues was good. The PMU engaged some staff members (project assistant and admin and finance officer) on individual consultancy basis, however the gap still existed at the component IPs level. The issue regarding clarity on government procedures for implementation of NIM projects was well resolved. Regarding Covid-19 pandemic and lockdowns the project management adopted the virtual means of holding different meetings and events.

Status of GEF financing and UNDP Co-financing was found satisfactory and as per schedule. However, cash co-financing committed by the GoP remained unsatisfactory. In-kind financing of GoP was more than the committed amount i.e., 105% of the committed amount. The overall financial delivery was 84%; 100% in 2017-18; 92% in 2019, 65% in 2020 and 93% in 2021). The low financial delivery in 2020 was mainly due to the Covid-19 pandemic

Progress towards objective and outcomes

Progress towards objective is assessed as moderately satisfactory. Progress on objective indicator-1 is partially complete. Work on upgradation of hardware and development and installation of software is in progress and is likely to be completed. Similarly, progress on the SOE reports is in progress and only guidelines could be developed and shared so far. Only federal level SOE report is likely to be updated. Progress on objective indicator-2 is mostly complete however, formal endorsement of PBS and other IPs is needed to ensure adoption of the identified indicators and variables for data collection, and the environmental screening of development projects. Objective indicator-3 is mostly achieved with minor changes in implementation strategy by engaging universities rather than NIPA or other government services academies in delivering the GGEB trainings. Progress on objective indicator-4 is partially achieved. There is need for quick finalization and dissemination of the awareness material. Moreover, quality of video documentaries (animated films) needs to be improved. Similarly, progress on objective indicator-5 is partially achieved. Due to Covid-19 pandemic only two onsite briefings and one visit could be organized against the total target of 24 briefings and 9 visits.

Progress towards outcome-1 was found moderately satisfactory. Major achievements under outcome-1 included; conducting of four studies; development of project dashboard for MoCC; review of environmental indicators; review of the existing protocols for data collection; support to PBS for publication of Env Compendium 2020. Generally, the quality of the studies/ reports was found acceptable however some errors and outdated data were found in some reports. The dashboard development under the outcome-1 indicator-2 does not seem to be relevant, this may come under the capacity building component. QC/ QA protocols were not developed and pilot tested. The Environmental compendium 2020 has been published however by comparing the contents with the 2015 compendium no significant changes were found.

Progress towards outcome-2 was also found moderately satisfactory. Major achievements include; study on designing technical and institutional framework for the EMIS, and; study on designing IT framework for the EMIS; Operationalization and inauguration of EMIS was reported in progress; studies on identification of key policy shifts or major developments that are required to integrate environment and development in Punjab, KPK and ICT; nomination of focal persons from IPs; development of two professional networks established in FJWU and DES of UoP; engagement of six interns; development of

research agenda for MoCC; conducting of twelve (12) research studies; development of a template for environmental profile / State of Environment report for Punjab and KP, and; development of 04 background papers related to UNCBD, UNFCCC, UNCCD and NDCs revision. Quality of the studies conducted under outcome-2 was found good. The EMIS developed was delayed due to the Covid-19 pandemic. Formal implementation and coordination committees at provincial level (one each at KP and Punjab Planning & Development Departments (P&D Departments) as described in the project document and the inception report could not be established mainly due to the Covid-19 pandemic. The IPs used their existing linkages and coordination arrangements; the PBS has its coordination system with the respective line departments while the provincial P&D Departments have their own Provincial Bureaus of Statistics having their own linkages.

Universities and academia are effectively engaged in workshops/ seminars. Good gender ratio maintained in hiring of interns (4 female and 2 male interns). Inconsistency in nomination and appointment of the lead coordination body for the EMIS was found; Pak EPA (proposed in the original ProDoc)-Environment and Climate Change unit of MoCC (proposed in the inception report)-Pak EPA (at present)). Status on the publication of the SOE reports for KP and Punjab is not very clear. At the moment only SOE report of ICT is expected to be updated for publication. Background papers regarding UNFCCC, UNCCD, UNCBD and the NDCs are draft and still not shared with the focal persons of the conventions. Achievements regarding partnerships with academia and universities and conducting research studies applying a market-based approach remained overall good.

Progress towards outcome-3 was comparatively good and was found satisfactory. The progress includes; Organizing of 12 lectures, 18 workshops/ seminars/ webinars/ trainings, and two RTCs; engagement of universities in policy research; engagement of government officials in capacity enhancement; development of research agenda and conducting of research studies; organizing of two visits of Media representatives/selected stakeholders; development of knowledge products related to EMIS and environment (Drafted brochure, newspaper articles, factsheets and reports). Development of two documentaries; organizing of two press briefings, and one onsite visit organized at CPEC site. Except the webinars, overall, the capacity enhancement activities remained good. Participants rated the events as moderate to high. The target of training/ exposing 400 government officials (regarding integration of environment in development) was well achieved though, with smaller number of events (18 out the total target of 45). Covid-19 was the major limiting factor. Good partnerships were developed with universities throughout Pakistan. The target of 12 research studies was completed through the DES of the UoP. The DES of the UoP was also engaged in the capacity building activities. Progress on development of awareness and learning material remained low. Quality of the documentaries need to be improved. Dissemination is still not done. Pak EPA needs to be taken on board to display these on its website. Achievements regarding briefings for opinion leaders is low; only two out of 24 briefings could be organized. Similarly, only one visit to CPEC site could be organized out the total target of 09 visits. This low achievement was again attributed to the Covid-19 pandemic. However, the gap was partially filled by adopting to the virtual means by engaging some officials and decision makers through various webinars.

Sustainability

Risks to financial sustainability were found as moderate. New projects like PLAN project of Pak EPA and Punjab Green Development Programme of Punjab P&D and Punjab EPD are expected to cover the financial and HR gaps. In KP the KP P&D has its Bureau of Statistics, which has its regular resources to carry forward

the work of GGEB project. Pak EPA should develop a separate PC-1 to carry the GGEB work forward. Risks to socio-economic and socio-political sustainability were found negligible as GGEB project supports environment by providing reliable data and information. Risks to the sustainability of institutional framework and governance are high. Provincial implementation and coordination committees could not be established, and formal MoUs could not be signed. However, the market-based approach adopted and introduced under the project for generating, sourcing and supplying information will contribute, to some extent, to the institutional sustainability regarding EMIS research and capacity building work. Overall risks to sustainability are thus high.

Catalytic Role / Replication Effect

The project extended its training, and awareness and sensitization activities to other provinces and partners. In addition to the two provinces of KPK and Punjab it also conducted these events in Sindh and Balochistan and established partnerships with universities. New projects such as the 10BTTP and the PGDP also included components regarding EMIS and publication of the Punjab SOE reports. As indicated in the ProDoc the EMIS extension to other provinces and inclusion of more organizations will ensure the replication of the EMIS.

Progress to Impact

As most of the activities were delayed high level impacts are not visible. However, some low-level impacts could be assessed such as acknowledgement of the need for an improved and robust EMIS by the IPs and their willingness for improved data collection, compilation and sharing. This is expected to contribute to a high-level impact of enhanced availability of consistent and reliable environmental data and information. Impact regarding enhanced awareness and capacities for mainstreaming environmental considerations in development was found moderate as assessed during the interviews and beneficiaries survey. Eighty percent of the beneficiaries surveyed had high impression of the quality and usefulness of the GGEB events; 75% supported environmental integration in development projects, and 38% also shared the recommendations of the workshops with their respective organizations. Review of various publications of the MoPD&R and the provincial P&D departments shows improved guidelines having recommendations and tools for integration of environmental considerations in developmental projects.

Lessons learned

- **Proper documentation and preparation led to successful coordination with the MoCC:** GGEB project being one of the initial projects to be implemented under NIM modality in Pakistan. Initially some procedural guidelines had been prepared by the EAD for NIM projects implementation, which lacked clarity on several financial, procurement and implementation aspects. The GGEB project faced these issues. The GGEB project team in consultation with the UNDP CO team after proper documentation and preparation successfully convinced the MoCC and EAD, and resolved the matter.
- **Proper understanding of government rules and procedures by the project team especially the NPC led to effective coordination with the MoCC:** According to the agreed procedures NIM project implementation requires approval of MoCC/ NPDs on proper government filing system. This needs proper knowledge on the part of the project team especially the NPC. Good ownership of the MoCC for the GGEB project was also due to adopting proper government procedures and filing system by the NPC and his team. The Assistant Project Officer had been appointed as the focal person for close follow up on the files sent to MoCC for approvals.

- **Alternate focal points to overcome the issue of high turnover of focal points of the federal and provincial IPs:** A good lesson regarding meeting the gaps due to high turnover of the focal points in provinces was to identify the alternate focal points (second in-charge in the office). This resolved the issue of transfer or retirement of the focal persons and resulted in continuity of the GGEB project activities.
- **Uncertainty of the overall EMIS leading body (Pak EPA-the Directorate General of Environment-Pak EPA) led to low ownership of the project and lack of interest:** According to the original ProDoc the lead coordinating body was the Pak EPA (as it also hosted the NEMIS and the Pakistan Geomatic Project). However, due to issues of coordination with provincial EPAs after the 18th constitutional amendment, as well as focal point for the national SOE reports the overall lead coordinating body was recommended to be the DG Environment. But on the ground situation changed again and the Pak EPA was declared as the lead coordinating body. The lesson drawn from this situation is that too much deviation from the original strategies often lead to uncertainties and affect the project results.
- **The market-based approach to research and capacity building remained successful mainly due to the high interest of the partners (FJWU and the DES of the UoP):** Both the Fatima Jinnah Women University (FJWU) and the Department of Environmental Sciences of the University of Peshawar took keen interest that led to the successful implementation of the research and capacity building activities.

1.5 Recommendation's summary table

Table 3: Summary recommendations

Recommendations	Action	Responsible organization/ party	Timeline
1. Development and approval of PC-1: One of the main reasons of delays in GGEB project was the development and approval of PC-1. The process should start at the early stages of the ProDoc development and approval.	For future GEF funded projects, the IP/MoCC should consider and resolve such issues at PIF/project formulation stage	MoCC	Mar 2022
2. Frequent changes of NPDs and project co-signatory: As recommended in the inception report and the addendum to ProDoc concerned technical heads of wings/ units/ attached departments of the MoCC should be nominated as the technical focal points/Co-NPDs and co-signatory of the project to fill the gaps. The NPD will be responsible for the overall supervision while the technical heads/ focal points will supervise the management, implementation and technical aspects of the projects.	For future GEF funded UNDP projects, the Implementing Partner (IP)/MoCC to consider appointing technical heads of relevant Wing/Unit/ Department as NPD/Deputy NPD in compliance with UNDP NIM guideline and use applicable government regulations/internal controls/processes for smooth implementation of projects.	MoCC	Mar 2022

<p>3. High turnover of focal points of the federal and provincial IPs: A good lesson regarding meeting the gaps due to high turnover of the focal points in provinces was to identify the alternate focal points (second in-charge in the office). These arrangements need to be adopted in future projects as well.</p>	<p>For future GEF funded UNDP projects, the IP/MoCC and provincial IPs to consider the good practice adopted by the provinces to cover gaps.</p>	<p>MoCC</p>	<p>Mar 2022</p>
<p>4. MoCC's supervision: Close liaison of the NPD and project team to ensure implementation of the planned activities. The NPD should have clear plan of action to ensure effective oversight and monitoring of the project activities (especially when there is no M&E position in projects).</p>	<ul style="list-style-type: none"> i. In future GEF projects the NPDs should have clear plan of action regarding supervision and monitoring of projects activities based. ii. Findings of the NPDs supervisory/ monitoring visits and meetings should also be reflected in the APRs. iii. Future projects should have M&E positions. 	<p>MoCC (I, ii) UNDP ECCU (iii)</p>	<p>Mar 2022</p>
<p>5. Changes in the project management and implementation strategy without proper approval: Some changes like non establishment of the implementation committees at provincial level and non-engagement of the provincial coordinators and their IT staff are neither documented nor any approval of competent forums/ authorities were provided by the project management. Such changes need to be properly approved from concerned forum and properly documented as well as explained in the APRs.</p>	<p>For the future GEF-funded UNDP projects, approval for any changes in the organizational/project coordination structure to be discussed and approved in the Project Board meetings. Moreover, such changes should be reflected in the AWP and APRs.</p>	<p>MoCC</p>	<p>Mar 2022</p>
<p>6. Completion of reminding planned activities and tasks: Some activities are reported by the project management as in progress. Project management should ensure completion of the planned activities and tasks.</p>	<ul style="list-style-type: none"> i. EMIS establishment and operationalization at Pak EPA; ii. Finalization and publication of SOE report (ICT level) iii. Finalization and dissemination of awareness material. Pak EPA should be briefed and guided to upload and share the awareness material on its website. iv. Develop and share QC/ QA protocols. v. Finalize and share the four background/ review papers related to UNCBD, UNFCCC, 	<ul style="list-style-type: none"> • NPC GGEB Project (I, ii, iii, iv, v) 	<p>Feb-Mar 2022</p>

	UNCCD and NDCs revision with the focal persons.		
7. Written commitment from the implementing partners about adoption of the GGEB recommended frameworks and tools for data collection: Formal MoUs with IPs and line departments could not be signed. There is risk to adoption of the GGEB frameworks and smooth data sharing. In such situation the IPs should give their written commitments. Some activities could not be conducted as per the ProDoc concept such as benchmarking of the SOE reports mainly due to delays in implementation. There is need for proper guidance of the Pak EPA to complete this process.	The NPD/ MoCC should write a letter to federal and provincial IPs (PBS, Pak EPA, Provincial P&Ds and Provincial EPAs) for adoption of the GGEB recommended frameworks and tools for data collection as well as regular data sharing.	NPD GGEB Project (MoCC),	Feb-Mar 2022
8. Improvement of EMIS system (server): The IT consultant recommended the cloud-based server instead of the in-premises server to avoid unnecessary operation, maintenance and data security issues. Pak EPA may consider this option in future.	The NPD should send a letter to Pak EPA to consider the option of cloud-based server for the EMIS under the new PLAN project.	MOCC/ NPD	Feb-Mar 2022
9. GoP's co-financing commitment: In-kind co-financing commitment of GoP remained satisfactory (105%). However, cash co-financing commitment could not be fulfilled. UNDP CO should closely and regularly monitor the status of co-financing, by holding review meetings both with the project team, NPD, MoCC and IPs.	i. In order to ensure that the GoP complies with its co-financing commitments UNDP CO should develop a clear strategy/ plan of action to closely monitor and follow up on the status of co-financing (in future GEF funded projects)	UNDP-CO	Feb-Mar 2022

2. Introduction

2.1 Purpose and objective of the TE

As outlined in the ToRs the TE aims “to assess the achievement of project results against what was expected to be achieved and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming”. The objectives of the terminal evaluation are 1). Evidence based assessment of the achievements of the project results, for the purpose

of accountability and transparency 2). Draw lessons for improving sustainability of benefits from the project and contribute to the overall enhancement of UNDP programming including MoCC and other relevant government departments.

2.2 Scope

The scope of the TE includes assessment of the GGEB project performance against expectations set out in the revised project's Logical Framework/Results Framework. Results are assessed according to the criteria outlined in the Guidance for TEs of UNDP-supported GEF-financed Projects (Guidance for Terminal Evaluations of UNDP-supported GEF-financed Projects). The TE report is structured as per outline provided in the ToRs. The findings of the TE mainly cover the topics related to; 1. Project Design/Formulation; 2. Project Implementation; 3. Project Results; and 4. Main Findings, Conclusions, Recommendations and Lessons Learned. Moreover, Evaluation Ratings for indicated aspects and topics is also provided as outlined in the ToRs. Generally, the TE covers the time period from March 9, 2016 (when the Project Document was formally signed) to 31 December 2021, however due to delays in implementation formal activities started with the inception workshop in December 2018. Therefore, the TE covers activities implemented from Dec 2018 (inception workshop) to Dec 2021 (date of the TE). Segments of target beneficiaries covered during the TE include; 1. Federal government organizations (Ministry of Climate Change and its attached departments and units, and Federal Bureau of Statistics); 2. Provincial government departments (Provincial P&D Departments; Provincial EPAs; Provincial Forest Departments); 3. Academia (Department of Environmental Sciences of the University of Peshawar, and Fatima Jinnah Women University); 4. Other beneficiaries (government officials, students and interns) and; 5. GGEB Project consultants Participants of different workshops and events, students, interns (male/ female), and ; 6. Experts engaged by the project as consultants. The TE covers all the three geographic areas of the project i.e., Islamabad Capital Territory (ICT), Punjab and Khyber Pakhtunkhwa (KP). and Details are given in the TE ToRs as Annex-1.

2.3 Methodology

The methodology for the terminal evaluation is principally guided by the TORs for the Terminal Evaluation and the Evaluation Criteria Matrix prepared for the GGEB Project TE on the basis of the *"Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects, 2020"* (Annex-2).

The methodology covers most of the aspects mentioned in the Guidance for Conducting Terminal Evaluations of UNDP-Supported GEF-Financed Projects (2020). The methodology, particularly, integrates three key methods: 1. Extensive documents review; 2. Review of special information and related analysis (requested to be provided by the project team), and; 3. Interviews and discussion with key stakeholders and beneficiaries. In addition to the TE tools such as TE criteria matrix and master interview guide/ checklist the TE consultant used his own expertise and knowledge as an environment and forestry expert as well as familiarity with the project area. However, the methodology has slight limitation regarding IT related aspects such as software and their specification. This gap was filled by interviewing and getting view points of the IT consultants engaged by the project. The TE methodology was based on the full cooperation and support of the project team, implementing partners and other key stakeholders to provide all relevant information and data including their timely availability for meetings and interviews. Moreover, the TE methodology considered both qualitative and quantitative information. Details are given as under.

2.3.1 Review of documents and reports

Review of documents, reports regarding progress on project outputs, outcomes and objectives as per indicators in the project design. Based on initial review of the ProDoc, Inception Report, and revised Project Results Framework, and initial discussions with the UNDP Country Programme team and project team additional information were also requested and reviewed. Annex-3 provides the list of documents provided and reviewed.

2.3.2 Compilation of information on project deliverables and status of outputs

Data on project deliverables and status of outputs were collected and compiled with the support and cooperation of the project team. Data on the overall achievements of indicators regarding objectives and outcomes (Annex-4), details of the events conducted, mode of implementation, number of participants (male/ female), and the post event activities (Annex-5), details regarding project financing (financing, co-financing and expenditure), responses to risks identified in the project results framework, and responses to issues and risks identified in the SESP were collected and compiled with the support of the project team.

Conducting semi-structured interviews

Interviews of project team, UNDP team, implementing partners, project stakeholders and beneficiaries were conducted. A master interview guide, comprising of questions, was developed and used for interviews (Annex-6). For field visits and interviews a mission plan was developed and shared with the project teams for coordinating the meetings and visits (Annex-7). List of project implementers and stakeholders was also prepared for conducting meetings and interviews. Accordingly, meetings were conducted with the project stakeholders and implementers (List of persons interviewed Annex-8).

Visits to project sites

GGEB Project does not have any physical implementation sites. Its work is limited to development of the EMIS, coordination and capacity building for integration of environment in development. The project work is confined mainly to the Pak EPA, PBS, Provincial P&D Departments and Provincial EPAs. These offices were visited during the interview process to crosscheck the existing HR, IT and data related situation.

Follow up discussion

Follow up discussions with project executive and management on key issues including strengths and weaknesses of project design and execution were also conducted. Moreover, to confirm the final situation a final feedback session was conducted with the GGEB project team and their response was recorded.

Triangulation and validation of information and comments

For triangulation and validation of comments of project team, partners and stakeholders regarding project results, implementation and lessons bottom-up information were collected and analyzed.

2.4 Data Collection & Analysis

As mentioned under the methodology both qualitative and quantitative information were collected and analysed using review of project documents, interviews with project team, implementing partners and consultants, and feedback from beneficiaries (participants of trainings, workshops and seminars etc.). The collected information and data were compiled in the form of analysis tables and descriptive text according to the following aspects of the terminal evaluation.

- Project formulation: (Relevance, design, main challenges)

- Project implementation (management structure, coordination, planning, monitoring, challenges, lessons)
- Effectiveness
- Project Results
- Sustainability, replicability, scalability
- Impact
- Cross cutting issues; Gender equality and women's empowerment:
 - Women involvement in the project inception and planning.
 - Offering equal employment opportunities to women.
 - Efforts to engage women in the project implementation.
 - Gender equity and integration in the environmental awareness, training and research activities of the project.

2.5 Limitations to the evaluation

The consultant faced the following limitations during the TE of the GGEB project;

- Risk of Covid-19. The new wave of Omicron variant of Corona Virus spread across Pakistan. The TE consultant himself suffered from the Covid-19 infection and had to quarantine himself for two weeks. The Admin and Finance Officer of the GGEB project also got infected. To mitigate this limitation the consultant adopted a combined strategy of physical visits and interviews with virtual interviews.
- It took longer than expected to get appointment for meetings with some key stakeholders mainly due to their busy schedule and risk of Covid-19 infection. As mentioned above virtual meetings/ interviews were also conducted along with physical meetings and interviews.
- Focal persons at PBS, Punjab Planning & Development Board had retired and were not available for interview, however their second-in-command (who also remained engaged with the GGEB Project) were interviewed.
- Some information such as copy of the PC-1, copies of the four background papers related to revision of reports regarding UNFCCC, UNCCD UNCBD, and NDCs, and contracts of consultants engaged, could not be provided to the TE consultant. The TE consultant filled the gap regarding non availability of contract agreements of the consultants by conducting interviews of the consultants and getting their feedback regarding their relevant assignments.

2.6 Structure of the TE report

The terminal evaluation report consists of five sections. Section-1, Executive Summary, presents a brief project information, evaluation ratings, summary of findings, conclusions, lessons learnt and recommendations. Section-2, Introduction, gives an overview of the purpose and scope of the TE, methodology, limitations, and structure of the TE report. Section-3, Project Description, presents an overview of the project duration, milestones, development context, problems and issues faced during implementation, immediate and development objectives of the project, expected results, main stakeholders, and the theory of change. Section-4, Findings, presents a detailed account of the TE findings regarding project design and formulation, implementation, and results. Section-5, Findings, gives detailed account of main findings, conclusions, recommendations, and lessons. As listed in the table of contents, the TE report contains 13 annexes including TE TORs; TE Mission itinerary; List of persons interviewed; List of documents reviewed; Evaluation Question Matrix; Questionnaire used and summary of results; TE rating scales; Signed Evaluation Consultant Agreement form; Signed UNEG Code of Conduct form; Signed

TE report clearance form, and; Separate annexes to the TE (Final Tracking Tool (Capacity Development scorecard); Audit trail with all comments obtained for draft TE).

2.7 Ethics

The terminal evaluation was conducted in accordance with the principles outlined in the United Nations Evaluation Group (UNEG) Ethical Guidelines for Evaluations'. The TE consultant followed the four ethical principles of integrity, accountability, respect and beneficence. Moreover, the evaluation activities were conducted that are independent, impartial and rigorous. Confidentiality of the respondents was also maintained during the process of evaluation as well as writing of the TE report. A duly signed copy of the "UNEG Code of Conduct" is provided as Annex 11.



3. Project Description

The UNDP-GEF project "Generating Global Environmental Benefits from Improved Decision-Making Systems and Local Planning in Pakistan" was designed as a three-year project building on the work of the NEMIS project of the Government of Pakistan, UNDP and the Netherlands. The project aims to develop a comprehensive environmental information management system that will enable informed policy making, planning and reporting on a consistent basis.

3.1 Project start and duration, including milestones

As per the signed project document the official start and end of the project were January 2016 and Dec 2018. However, due to some administrative issues it took two years and nine months to formally kickstart the project. As required under the National Implementation Modality (NIM) the project PC-1 was prepared on 23-6-2017, which (after approval of the Central Development Working Party (CDWP)) was finally authorized by the Ministry of Planning, Development & Reforms (MoPDR) on 03-08-2018 keeping the already agreed total duration of the project as 36 months. Accordingly, the MoCC/ IP gave the administrative approval to formally start the project in 2019. The project is now expected to complete in March 2022. Tabpe-4 gives project timeline.

Table 4: Project timeline (red ellipse indicates excessive delay)

06 Mar 2013	18 Sep 2013	09 Jun 2015	09 Mar, 2016	18 Dec, 2018	31 Dec, 2018	09 Mar, 2019	Dec 2021	09 Mar 2022
								
Submission of PIF (project concept)	PIF (project concept) approved	Full project approved: "CEO Endorsement"	ProDoc signed; official project start	 Inception Workshop	Original Project Close Date	Revised Project Start Date	Terminal Evaluation (TE) Mission	Revised project close date

3.2 Development context: environmental, socio-economic, institutional, and policy factors relevant to the project objective and scope

The GGEB project was developed in 2014 and approved in March 2016, however it was formally started with the inception workshop in December 2018 with a gap of more than two years. The delays resulted in

changes in the environmental, socio-economic and institutional and policy context. These aspects and situations are reflected under this section.

3.2.1 Environmental context

Pakistan has unique and diverse landscapes with 1,046 km long coastal area in the south, vast deserts of Thar, Thal, and Cholistan in the middle and the world's highest mountain ranges like Himalayas, Karakoram and Hindukush in the north. These landscapes have variety of ecosystems and rich biodiversity. These include coastal and marine ecosystems, mangroves, Indus delta, riverain forests, dry tropical thorn forests, irrigated plantations, tropical deciduous forests, subtropical broad leaved evergreen forests, sub-tropical pine forests, dry temperate forests, moist temperate forests, sub-alpine forests, alpine pastures, glaciers and permanent snow fields, Trans-Himalayan Alps and Plateau, nature lakes, and man-made reservoirs and wetlands. Out of these ecosystems three are considered critically endangered: tropical deciduous forests of Himalayan Foothills; moist and dry Himalayan temperate forests; and Trans-Himalayan Alps and plateau. These ecosystems host variety of flora and fauna including globally significant species like snow Leopard, Markhor, Ladakh Urial, Musk Deer, Kashmir Grey Langur, Asiatic Black Bear, Himalayan Brown Bear, Eurasian Lynx, Common Leopard, Eurasian Otter, and woolly flying squirrel. In addition to these there are key birds and plant species considered to be endangered. Pakistan's agrobiodiversity is also considered under tremendous pressure. Some of our local crop species and varieties and their wild relatives such as wheat, millets, pea and fruits (making an invaluable part of the global genetic gene pool) are facing threats of extinction. Pakistan being mainly an agrarian economy has more than 60% of its population dependent on agriculture has one of the largest irrigation systems of the world fed by the glacial melt from the three mountain ranges.

Due to its geographic location and fragile ecosystems Pakistan is extremely vulnerable to climate change. In 2014 Pakistan was ranked number-3 on the Global Climate Risk Index, with over US \$2.4 billion losses during 1993-2012 due to climate change mainly caused by floods. This situation greatly signifies the importance of environmental management in Pakistan. Up to date and reliable data and information about environment and biodiversity in general and the agrobiodiversity in particular has been a big issue in Pakistan to properly plan for their conservation and recovery. Most of the available data and information are outdated, sketchy and fragmented and are also not accessible. Lack of reliable and consistent environmental information is also recognized in the National Conservation Strategy (NCS), National Environment Action Plan, Provincial Conservation Strategies and other policies. This recognition led to the funding of various projects to strengthen environmental information management systems and initiation of several projects like Sustainable Development Network of Pakistan, Pakistan Development Gateway, development of provincial environmental profiles, Pakistan Water Portal, Pakistan Weather Portal, National Environmental Management Information Systems (NEMIS), Pakistan Geomatic Project, National Disaster Management Information System (NDMIS) and many others. However, these efforts remained fragmented and lacked sustainability.

3.2.2 Socio-economic context

Except farming, education and health sectors, pace of bringing women into other economic mainstreams has always been slow in Pakistan. Though the government and Non-Government Organisations (NGOs) are trying to bridge this gap more efforts are needed in this regard. Moreover, politicization of economic development ignoring the sustainability considerations is another major issue in Pakistan. This aspect has often been ignored by the previous capacity building efforts. This aspect has been embedded in the GGEB project activities i.e., using tools like reaching out to people and media to generate the demand and support for long term sustainability.

3.2.3 Institutional, and policy context

Pakistan is signatory to several environmental conventions such as the United Nation Framework Convention on Climate Change (UNFCCC), United Nation Convention to Combat Desertification (UNCCD) and United Convention on Biodiversity (NCBD) including the millennium development goals (now sustainable development goals). These conventions necessitate the internalization of international obligations in Pakistan's domestic policies and laws. The last two decades have therefore seen an increasing priority to environment among the government policy makers and planners. Several acts, policies and strategies were formulated, institutions created and mega projects initiated in this regard. These included promulgation of the Pakistan Climate Change Act 2017, KP Forest Ordinance 2002, KP Wildlife and Biodiversity Act 2015, KP Tourism Act 2019, Punjab Protected Areas Act 2020, and Balochistan Wildlife Act 2014. The policies, strategies and action plans included the National Environment Action Plan (NEAP), Biodiversity Action Plan (BAP 2000), National Climate Change Policy 2012, National Forest Policy 2015, Pakistan National Biodiversity Strategy Action Plan 2017, and National REDD+ Strategy 2018. Major environment related institutions created during this period included the National Council for the Conservation of Wildlife, Environment Sections in the Planning Commission of Pakistan and Provincial P&D Departments, creation of provincial Environmental Protection Agencies (EPAs), creation of the Climate Change Council and the Climate Change Authority. Moreover, mega environmental projects like Billion Tree Tsunami Afforestation Project in KP, Green Pakistan Programme, the Ten Billion Tree Tsunami Project, the National REDD Readiness Project, Sustainable Forest Management Project and the Glacial Lake Outburst Flood Risk Reduction (GLOF-II) Project were also launched. All these initiatives also shifted the requirement for data and information from environment to climate change further widening the scope of the GGEB's EMIS.

Despite the abovementioned initiatives, some gaps and shortcomings also existed in the provincial and federal institutions' coordination regarding environmental data, compilation and sharing. Provincial line departments and agencies mandated for the management and regulation of resources like forest, wildlife, environment, agriculture, minerals, water resources etc., generated their own data and information mainly for their own use and planning. However, they shared the data with the provincial and federal bureaus of statistics for further compilation and publication. Pakistan Bureau of Statistics collected and compiled the environmental data in the form an environmental compendium usually published at five-year interval. The main shortcomings in the process were the gaps in the environmental data and lack of converting the data into useful information for proper decision making.

On the legal and constitutional side some amendments in the constitution and updating and revision of environmental laws were also done during the last two decades. The Eighteenth Amendment of the Constitution of Pakistan, 2010 devolving the subject of environment to provinces had both positive and negative effects. Though, the amendment enhanced the provincial autonomy in-terms of natural resource management, environmental monitoring, reporting and information management however, some areas like mandate for costal protection and conservation, production of national level state of environment reports, interprovincial and international transboundary cooperation, and effective compliance reporting on international environmental conventions were left unattended. The devolution also resulted in the promulgation of provincial environmental protection acts. Moreover, the 18th amendment had some negative impact on the coordination and data and information sharing among the federal and provincial environmental institutions. The Pak EPA was changed to Federal EPA with jurisdiction of Islamabad Capital Territory, whereas the provincial EPAs assumed the entire responsibility of environment monitoring as well as technical reporting including producing the state of the environment reports.

The 18th Amendment also affected the NEMIS project's sustainability as well as some impacts on the GGEB project especially when it comes to linkages and coordination among the EPAs. GGEB Project's main point has been to ensure the continuity of the NEMIS project's work disrupted due to the 18th Constitutional Amendment 2010. The 18th Amendment also resulted in contextual changes of the GGEB Project leading to changes in the Project Results Framework.

3.3 Problems that the project sought to address, threats and barriers targeted

The GGEB Project faced following threats and barriers during its course of implementation.

- Initial administrative issues like development and approval of PC-1 and hiring and re-hiring of the key project staff (the National Project Coordinator and Assistant Project Officer) took more than two years to formally kickstart the project. Due to changes in the project context some necessary changes had to be made in the project results framework at the output and activities level. The project's start and end dates were also changed as 09 March 2019 and 09 March 2022.
- The GGEB project as one of the initial NIM projects in Pakistan also faced issues related to lack of clarity under the GoP's Guidelines-2011 for implementation of NIM projects. The project management had to develop clarity regarding opening of project account, conducting of audits and procedures for procurement as well as to get formal approval from the MoCC and Economic Affairs Division (EAD). The project management dealt with this situation in a strategic manner and succeeded in creating clarities and getting necessary approvals regarding GoP's procedures for adopting the NIM modalities.
- Frequent changes of the GGEB Project NPDs causing delays in implementation of the project. During the three years implementation the National Project Directors were changed for seven times. This situation resulted in delays in holding of the Project Steering Committee (PSC) meetings, approval of the Annual Work Plans (AWPs) and project delivery especially during 2020. The situation was actually beyond the control of project team and could only follow up on outstanding matters with the new NPDs. Following officials remained NPDs of the project;
 - Mr. Mohammad Salman, Joint Secretary (Jan-2019 to Feb 2019);
 - Mr. Hassan Nasir Jamy, Federal Secretary (Feb 2019-Dec 2019)
 - Mr. Amir Ashraf Khawaja, Federal Secretary (Dec 2019-Jan 2020)
 - Ms. Naheed S. Durrani, Federal Secretary (January 2020-April 2020)
 - Mr. Nadeem Ahmad Malik, Joint Secretary (April 2020- July 2020)
 - Mr. Irfan Tariq, Director General Environment & Climate Change (July 2020-July 2021)
 - Mr. Muhammad Suleyman Khan, Joint Secretary (July 2021-present)
- The Covid-19 pandemic: The project also experienced issues of complete and partial lockdowns limiting the implementation of project activities especially the capacity building activities, and coordination and meetings with different stakeholders and technical experts. During the Covid-19 pandemic two key officials of the project were also infected. As adopted by most of the organizations the GGEB project management also resorted to virtual means of holding project meetings and capacity building events. However, as reported by the project management some shortcomings also existed in the virtual means as compared with the physical ones.
- Turnover of GGEB focal points: GGEB focal points in Pakistan Bureau of Statistics, Planning & Development Board-Punjab and KP EPA have changed due the retirement and transfer. This situation has affected the coordination with the focal organizations; however, the project team has taken their alternatives on board and established liaison with them.

- Delays in release of advance funds due to Harmonized Approach to Cash Transfers (HACT) audit observations 2021. Though the overall audit observations of GGEB project ranged from low to medium risk level, however significant audit observations of other NIM projects of the MoCC resulted in discontinuation of releasing NIM Advances from the UNDP Country Office to IP. The UNDP Country Office had made the releases conditional to resolving all HACT Audit observations by the IP/ NIM projects. Resolving the audit observations took some time and resulted in delays in project delivery. A proactive approach was adopted by the UNDP Country Office and the IP to work closely and resolve the issue. The issue was resolved in a joint meeting held in June 2021.

3.4 Immediate and development objectives of the project

The project's overall goal is 'Generating Global Environmental Benefits from Improved Decision Making in Pakistan'. Its specific objective is 'to remove the barriers to environmental information management and mainstreaming global environment concerns into economic decision making'. The objective has two parts i.e., the first one is related to environmental information, and the other to employing this information for improved economic decision making. The project has two components of:

- c) establishing a robust environmental information management system; and
- d) stimulating commitments and filling gaps in capacities for integrating environment and development.

3.5 Expected results

The project has three interrelated outcomes: 1). Regular availability of consistent and reliable environmental data; 2). A coordinated and robust environmental information management system, and; 3). Enhanced commitment and capacity for sustainable development planning and legislation. The project focus is targeted at the issues of biodiversity conservation, climate change and desertification with a view to enhance the implementation and reporting under the relevant multilateral agreements. Due to some contextual changes during the period between March 2016 (signing of the project document) to March 2018 (approval of the PC-1) the project document was fine-tuned in line with the contemporary national context. Accordingly, during the inception phase, some changes were made at the output level and the activities were tuned to the changed context while the outcomes and their associated indicators were kept unchanged. Following outputs and targets have been adopted from the inception report, addendum to the project document and revised project result framework.

Outcome-1: Regular availability of consistent and reliable environmental data (GEF Budget USD 80500):

Outcome-1 aims at strengthening the gathering of primary data, its compilation and flow to a point where it is housed and accessible as a one-stop shop for consistent data to be, at least sourced and referenced by all government plans and reporting for consistency. As per original project document outcome-1 has eight outputs however, due to change made during the inception phase reducing the outputs to seven. These outputs and associated activities are;

Output 1.1: A Unified Collection, Storage and Access System for Primary Data

- a. Review of the current system of collection, processing and dissemination of environmental information in relevant institutions (Federal EPA, MoCC, Bureau of Statistics and P&D Division, KP EPA, KP Environment Department including Forestry and Wildlife, Industries, Energy and Transport Departments; Punjab Environment Protection Department, Punjab Forest and Wildlife departments, and Punjab Industry and Transport, and Energy departments).
- b. Need assessment study of relevant institutions at provincial and federal level for development and operationalization of environmental information system

- c. Review of various environmental information management systems for exploring/documenting best practices

Output 1.2: An Established List of Priorities for Data Gathering and Reporting

- a. Study to prioritize indicators identified by NEMIS
- b. Arrange two consultative workshops (one each in Punjab and KP) to establish list of priorities for data gathering and reporting

Output 1.3: A Report of Bench Marking of Environmental Statistics of Pakistan with Environmental Data Requirement

Output-1.3 was rephrased recommending that the environmental data requirements will be determined through the relevant departments afresh rather than as determined by NEMIS as the situation on the ground had substantially changed due to devolution and other changes in the institutions.

- a. Review of existing protocols adopted by various stakeholder/departments for gathering primary environmental data
- b. Hold two roundtable conferences (RTC) each in Punjab and KP for identification and removing of gaps in the existing protocols
- c. Hold one roundtable conference (RTC) in Islamabad for finalizing gaps in the existing protocols

Output 1.4: An Agreement between the Climate Change Division (CCD) and Pakistan Bureau of Statistics (PBS)

- a. Identification of additional environmental information to be collected and reported by PBS
- b. Develop and sign agreement between Ministry of Climate Change and Pakistan Bureau of Statistics (PBS) for joint cooperation with clear terms of partnership.

Output 1.5: Reformed Data Collection Tools and Approaches and clarified the mandate for residual data collection

Output-1.5 “Reformed Data Collection Tools and Approaches” and 1.7 “Mandate for Collecting Residual Data” were merged due to their same nature and relevance to the same stakeholder i.e., the PBS. The target under 1.5 was decided to include clarifying or freshly establishing the mandate for collecting left over essential data that Bureau of Statistics is unable to internalize in their system.

- a. Review and assess various tools, surveys, and approaches that Pakistan Bureaus of Statistics (PBS) uses for gathering and reporting the environmental data to make them inclusive
- b. Assess and establish the mandate for environmental requirements of PBS for ensuring the completeness of availability for essential data

Output 1.6: Environment Statistics of Pakistan

- a. Support Federal Bureau of Statistics for producing Environment Statistics of Pakistan with additional information as agreed between Pakistan Bureau of Statistics (PBS) and MoCC
- b. Publish one annual report on Environment Statistics of Pakistan by the Federal Bureau of Statistics through support of GGEB project (report of year 2021)

Output 1.7: Protocols of Quality Assurance of Environment Data

Output 1.8 in the original project document was renumbered due to the clubbing together of output 1.7 and 1.5.

- a. Develop and pilot test Quality Assurance Protocols of environment data (Select two entities from Punjab and two in KP responsible for gathering primary data)

Outcome-2: A Coordinated and Robust Environmental Information Management System (GEF Budget USD 265000): This outcome aims to take forward the work of previous projects especially the NEMIS and its successor Pakistan Geomatic Project. It aims to functional and sustainable EMIS by making the system operational, actively managing it, effectively coordinating with member organizations contributing the information, and cultivating their ownership and support. This outcome has six outputs and their activities. In the original project document this outcome had seven outputs however, during the inception phase output 2.4 and 2.5 were merged together and the activities are clubbed together under output 2.4 due to their similar nature.

These are given as under.

Output 2.1: An Effectively Operating National Environmental Information Management System

- a. Review and assess the status of existing IMS in federal level as well as the two pilot provinces and propose adequate framework for the IMS in the light of NEMIS Project evaluation's recommendations
- b. Arrange workshops in 2 provinces of Pakistan for designing EMIS at national level
- c. Develop linkages between universities and the stakeholders/departments by engaging students through internship programme for environmental data & research activities

Output 2.2: Policy Research and Analysis

- a. Carry out one study in Punjab province comprising three policy analysis for identifying the key policy shifts or major developments that they require to integrate environment and development in their province.
- b. Carry out one study in KP province comprising three policy analysis for identifying the key policy shifts or major developments that they require to integrate environment and development in in their province.
- c. Carry out one study in Islamabad comprising three policy analysis for identifying the key policy shifts or major developments that they require to integrate environment and development in in their province

Output 2.3: Pakistan's State of Environment Report(s)

- a. Produce State of the Environment report for Pakistan in 2020

Output 2.4: Provincial State of the Environment Reports including benchmarking with National State of the Environment report

Output 2.4 and 2.5 were merged together and the activities are clubbed together under output 2.4 due to their similar nature. Moreover, the target of producing annual state of the environment (SOE) reports was also reduced to three instead (two provincial and one federal level SOE reports).

- a. Produce State of the Environment report for Punjab in 2020 including benchmarking with the National state of environment report.

- b. Produce State of the Environment report for Khyber Pakhtunkhwa in 2020 including benchmarking marking with the National state of environment report.

Output 2.5: Country Reports under Multilateral Agreements

- a. Provide technical support to MoCC for preparation of country reports against the Rio Convention. Support was to be extended in the production of reports against the three conventions (CBD, UNCCD, UNFCCC) by increasing the existing allocation for this output.

Output 2.6: Harnessing Research Capacity and Opportunities in Universities

- a. Sign MOU with one university in Punjab for executing six research projects contributing to the environmental management system
- b. Sign MOU with one university in KP for executing six research projects contributing to the environmental management system
- c. Harnessing research capacity of the universities by providing grants for conducting research in the relevant fields and sign MOUs between the Ministry of Climate Change and 2 Universities

Outputs and activities under Outcome 3: Enhanced commitment and capacity for sustainable development planning and legislation (GEF Funds: USD 559500): This outcome aims to improve integration of environmental consideration in developmental programs and projects of the government by building capacity, awareness and sensitization of government functionaries, civil service, politicians and decision makers. This outcome consists of four outputs and their associated activities. In the original document these outputs were five however, output 3.4 and 3.5 were merged together during the inception phase. These are as under.

Output 3.1: Exposure and Training of Civil Service

- a. Organize inception workshop / seminar and review of Project Document based on post 18th constitutional amendment and present scenario.
- b. Sign an agreement with National Institute of Public Administration (NIPA)/Administrative Staff College for incorporating environmental lectures in their training modules
- c. Organize 12 lectures on environment related topics for government officers through NIPA
- d. Need based capacity Building and training programmes for relevant civil servants/GGEB staff and related stakeholders by carrying out visits national and/or international
- e. Arrange a series environmental workshops/seminars 15 each in Islamabad, Punjab and KP related to the relevant departments/organizations

Output 3.2: Enhanced Access of Planning Functions to Environmental Expertise

- a. Carry out study to develop a market-based mechanism to policy research and analysis in which the government, on one hand, will act as a supplier of information made possible by the unified data collection and reporting system and the EMIS, and on the other it serves as the market for policy research and analysis.
- b. Procurement of Software, IT Servers and necessary equipment for setting up the Environmental Information Management System.
- c. Development one pilot system for storage and access system to primary environmental information generated by relevant

Output 3.3: An Engaged Polity

- a. Arrange a dialogue of selected political representatives to enhance their understanding about environment and support to integrate environment and development

Output 3:4: Supportive Public Opinion through Media Support

Output 3.4 and 3.5 were merged together as output-3.4 due to their similar nature.

- a. Engage social/electronic media/TV channel for public awareness related to environment through adequate awareness raising campaigns / awareness raising communication activities.
- b. Arrange six visits of media representatives to various sites in Pakistan for providing on-site briefings about implications of development projects for environment.

3.6 Financing

The GGEB project is a medium sized project of the GEF 5 programming cycle. The total cost of the project is USD 1,935,550 out of which the GEF financing is USD 995,500 (cash), GOP's financing is USD 722,350 (cash/ in kind), and UNDP's financing is USD 217,700 (cash/ in kind).

3.7 Implementation arrangement

The project is implemented under the National Implementation Modality (NIM). The Ministry of Climate Change, Government of Pakistan has the lead responsibility and role for implementing the project. Other key implementing partners include the Federal Bureau of Statistics, Planning and Development Division of Pakistan, Pak EPA at the federal level while Punjab P&D Department, KPK P&D Department, Punjab EPA and KPK EPA at the provincial level. They have their implementing and coordination roles under their respective components. For research the project works with two universities; Department of Environmental Sciences of the University of Peshawar, and Fatima Jinnah Women University Rawalpindi.

According to the original project document the project implementation structure consists of a National Project Director (NPD), an existing senior Officer of BS 20 or above, a National Project Coordinator (NPC) hired under the project for the overall coordination and implementation of the project. Other project staff include Assistant Project Officer, and Support Staff. At province there are provincial counter parts one each for Punjab and KPK (from the provincial governments). In addition to these the project also provides Pak EPA, Chief Environment, Planning and Development Division, Chief Environment Punjab, Chief Environment KPK, Director General (DG) EPA Punjab, DG EPA KPK, and Pakistan Bureau of Statistics with a dedicated IT coordinator funded either from the GEF funds, or co-financing or parallel financing. Some changes were done in the project committees during the inception phase. According to the addendum to the project document following two level committees were proposed for the project.

- National Level Project Steering Committee, with members including DG EPA, Chief Environment, Planning and Development Division, a representative of Pakistan Bureau of Statistics, a representative each from the P&D Departments and EPAs of Punjab and KPK, a representative of the UNDP, and two representatives of the civil society.
- Two separate provincial level implementation committees one each for Punjab and KP led by the Secretary P&D for the implementation of the project at the province level. The provincial committees will have representation of EPA, Provincial bureau of statistics, environment, transport, industry, and other relevant departments.

3.8 Main stakeholders: summary list

Main stakeholders of the GGEB project are listed below;

2. Ministry of Climate Change (MoCC) is both the project IP and stakeholder. MoCC being responsible for all environment, climate change and biodiversity related matters at the federal level and also as

a focal point of the international Multilateral Environmental Agreements (MEAs) including the three Rio conventions of UNFCCC, UNCCD and UNCBD is the main stakeholder of the project in terms of use of EMIS and improved reporting on the three Rio conventions. MoCC has the following wings and attached departments responsible for different environmental aspects;

- a. Federal Environmental Protection Agency/ Pak EPA;
 - b. Directorate of Environment and Climate Change;
 - c. Office of the Inspector General of Forests;
 - d. Global Climate Change Impact Study Center (GCISC);
 - e. Zoological Survey of Pakistan (ZSP)
3. Pakistan Bureau of Statistics, Islamabad: Responsible for collection, compilation and publication of all statistical data and information related to development and non-development sectors. The PBS has the main stake of data collection, compilation, publication and dissemination.
 4. P&D Division, Ministry of Planning Development and Reforms (MoPD&R). Responsible for the planning and financing of developmental projects and programmes in Pakistan.
 5. Provincial Planning and Development Departments: Responsible for provincial level planning and financing of developmental projects;
 - a. Planning & Development Board, Punjab
 - b. Planning & Development Department, KP
 6. Provincial EPAs: Responsible for enforcement of environmental protection laws and regulations at provincial level, generating of environmental data and information, and conducting of Environmental Impact Assessments (EIAs) etc.
 - a. Punjab Environmental Protection Department and EPA;
 - b. KP EPA;
 7. Provincial Forest Departments: Responsible for the management and regulation of forest resources under the provincial forest acts. They also generate and compile forestry related data and information.
 - a. Punjab Forest Department; The department also have Punjab Forest Services Academy and Punjab Forest Research Institute Ghatwala.
 - b. KP Forest Department; It is worth noting that Pakistan Forest Institute has been devolved to KP under the 18th Constitutional Amendment.
 8. Provincial wildlife departments: Responsible for the management and regulation of wildlife, biodiversity and protected areas under the provincial wildlife acts. They also generate and compile data and information related to wildlife, biodiversity, habitats and protected areas.
 - a. Punjab Wildlife Department;
 - b. KP Wildlife Department;
 9. Provincial agriculture departments: Responsible for agriculture extension, research and other agriculture related activities such as on-farm water management at provincial level. They also generate and compile data and information.
 - a. Punjab Agriculture Department
 - b. KP Agriculture Department
 10. Provincial departments of industries: They promote industrial development, trade and investment in provinces. They also work on Industrial Research, Industrial training (including training of demonstration parties) Industrial exhibition within the country, Survey of industries, Trade, and commerce, within the provinces.
 - a. Department of industries, Punjab

- b. Department of industries, KP
- 11. Provincial energy and power departments: They are responsible for regulation and policy formulation regarding power sector.
 - a. KP Energy & Power Department:
 - b. Energy department, Punjab:
- 12. Provincial transport department: They are responsible for legislation, policy formulation and regulation of transport sector at provincial level.
 - a. Punjab Transport Department.
 - b. KP Transport Department.
- 13. National and Provincial Training Institutions:
 - a. Pakistan Administrative Staff College
 - b. National Institute of Public Administration
- 14. Academia/ universities: The project has engaged two universities for relevant research and organizing various seminars and events.
 - a. Department of Environmental Sciences, University of Peshawar
 - b. Fatima Jinnah Women University, Rawalpindi
- 15. Environment related NGOs:
 - a. WWF-Pakistan
 - b. IUCN-Pakistan
 - c. Sustainable Development Policy Institute (SDPI)
 - d. Strengthening Participatory Organizations (SPO)

3.9 Theory of Change

The project results framework/ logical framework was developed during the project formulation in consultation with stakeholders. The revised PRF is provided as Annex-9. Narrative of the project theory of change, as given in the ProDoc, is as following.

The logic of the GGEB project premised on the assumption that Pakistan's planning and development institutions responsible for cross sector coordination and environment-development integration such as P&D Departments in provinces, environment and other sections in Planning and Development Division of Pakistan and focal points for multilateral agreements, lack capacity and resources constraining sustained access to environmental information. Most of the environmental information are periodically generated under projects often implemented through collaborative efforts between the public and non-profit sector such as Sustainable Development Network of Pakistan (SDNP) implemented by International Union for Conservation of Nature (IUCN) and Pakistan Wetland Inventory Portal developed by World Wide Fund For Nature (WWF) under the Pakistan Wetland Program (2007-2012). Such collaboration between the public and private sector represented a major strength of the environmental infrastructure in the country. Some projects like NEMIS and Pakistan Geomatic Projects implemented by the UNDP and MoCC, completed much of the spadework regarding development of EMIS however due the 18th constitutional amendment these initiatives faced issues of sustainability.

The need for consistently available environmental information to support mainstreaming of environment in economic development has been recognized in NCS and all subsequent policy initiatives of National Environment Action Plan, Provincial Conservation Strategies, forest policy, climate change policy and notably the National Capacity Self-Assessment (NCSA).

Pakistan is signatory to several environmental conventions such as the UNFCCC, UNCCD and UNCBD including the millennium development goals (now sustainable development goals). These conventions necessitate the internalization of international obligations in Pakistan's domestic policies and laws. All the three Rio Conventions recognize the importance of capacity building for their implementation. The Rio Conventions recognize six types of capacities: stakeholder engagement, organizational capacities, environmental governance, knowledge and information management, and, monitoring and evaluation.

UNDP also has its strategic priority of 'Strengthened national capacities to mainstream environment and energy concerns into national development plans and implementation systems' and has its country program outcome: 'Commitments under global conventions on biodiversity implemented'.

UNDP has a strong mandate to help manage environment for sustainable development and has rich experience in integrating environment and development implementing several global environmental information and integration projects similar to the GGEB project in Pakistan. In Pakistan, UNDP has a long history spanning more than half a century engaging and supporting big and small projects ranging from institutional development, to capacity building, poverty alleviation, environment protection and nature conservation.

The project's overall implementing partner the federal Ministry of Climate Change (MoCC) including its units and wings (the Pak EPA and the Directorate General of Environment) have a long history of implementing environmental projects in Pakistan as well as coordinating the international environmental conventions (UNCCD, UNFCCC and UNCBD). Other IPs (the PBS and Provincial P&Ds and EPAs) also have their relevant mandates of environmental and developmental statistics and data, planning of environmental and developmental projects and enforcement of environmental laws. The GGEB project is implemented by all these stakeholders in coordination with each other.

The project aims at 'Generating Global Environmental Benefits from Improved Decision Making in Pakistan'. Its more specific objectives are 'to remove the barriers to environmental information management and mainstreaming global environment concerns into economic decision making'. The objective is two-fold in its focus, one related to environmental information, and the other to employing this information for improved economic decision making. The project thus has two inter-related components of: (a) establishing a robust environmental information management system; and (b) stimulating commitments and filling gaps in capacities for integrating environment and development. The project has three outcomes; (1) Regular availability of consistent and reliable environmental data; (2) A coordinated and robust environmental information management system, and; (3) Enhanced commitment and capacity for sustainable development planning and legislation. The projects objectives and outcomes will be achieved provided the following key assumption and pre-conditions are fulfilled.

- It is assumed that most of the spade work has already been done, and that it wouldn't take much of the project's resources to have the NEMIS pending outputs reach fruition. The approval and adoption of the environmental reporting framework will require an understanding and agreement among stakeholders, notably, with the provinces to follow the framework consistently
- The target organizations and their staff will be interested to participate in the environmental training and exposure programs. Moreover, the governments will be interested and supportive of trying the alternative approach of capacity building through professional networks. There are enough willing and able participating entities for the market-based approach to be initiated, tested and established.

- Willingness and support of the participating government ministries, departments and NGOs to try the alternate market-based approaches. Most essential is an effective engagement of the members of parliament and provincial assemblies.
- Agreements between Ministry of Climate Change, Pak EPA and Pakistan Bureau of Statistics on environment data gathering and reporting reforms/improvements exist. Agreement between Bureau of Statistics, its counterpart in Provinces, and the agencies gathering primary data exists.
- Agreement and effective collaboration between provincial EPAs responsible for coordinating the related output and the target data gathering agencies exists.
- The Planning and Development Division, provincial P&D Departments, and EPAs are interested to explore, test and support the alternate of market-based approach.
- Political leadership supporting integration of environment in development projects.

4. Findings

4.1 Project Design/Formulation

The GGEB Project is highly relevant and is based on the needs identified in various national policies and strategies as well as during the consultation process conducted for the project formulation. All of the respondents interviewed ranked the GGEB project as highly relevant and in according to the needs for updated and reliable environmental data as well as the need for integrating of environmental considerations in development. The project is in conformity with the national policies and strategies including National Conservation Strategy (NCS), National Biodiversity Strategy Action Plan, National Climate Change Policy and National Forest Policy. The project is well aligned with the GEF-5 programme framework for Cross-Cutting Capacity Development, and UNDP's strategic priority of 'Strengthened national capacities to mainstream environment and energy concerns into national development plans and implementation systems' and with UNDP's Country Program Outcome: 'Commitments under global conventions on biodiversity implemented'.

In general, the project is well designed giving detailed account of the background context, the previous projects and their work, issues related to their work, and the need for improvement and sustainability. The project has clear objectives, well formulated outcomes, outputs and activities. Despite all these strengths the project is too much dependent on the previous projects' work such as the NEMIS and Geomatic project, which also faced sustainability issues. Moreover, targets under some activities seem to be unrealistic keeping in view the project financial and human resources. Also, the project implementation structure is too scanty with little technical expertise provided for smooth implementation of technical activities as well as ensuring quality. The positions of component coordinators within the PBS, P&Ds and EPAs were provided under the co-financing/ in-kind support, which could not be materialized. Details are provided as under.

4.1.1 Analysis of Results Framework: project logic and strategy, indicators

The Project Results Framework is properly constructed having properly defined goal, objective, outcomes and outputs. The project's overall goal of "Generating Global Environmental Benefits from Improved Decision Making in Pakistan" and objective "Removing the barriers to environmental information management and mainstreaming global environment concerns into economic decision making" are in line with the UN Country Programme Document; the applicable GEF strategic objectives, focal area, and expected outcomes, and the national priorities. The results framework (refined and adjusted during the inception phase), presents a good logical "chain of results" comprising of Outputs, Outcomes, Objective,

and Overall Goal. The results framework does not contain activities however these are provided in descriptive form in the original ProDoc while the inception report and the addendum to the ProDoc have mentioned activities under each output. Project activities contribute to a total of 17 outputs further contributing to three expected outcomes. The results framework has properly defined indicators, baselines, project end targets, sources of verification and assumptions. Minor deficiencies have been noted in the project results framework. As discussed, the framework does not contain detailed activities. Targets under the outcome-3 “Enhanced commitment and capacity for sustainable development planning and legislation” regarding training of 400 government officials through 90 workshops and seminars, and 12 guest lectures seems to be a bit overambitious. It needs more than two years to conduct these events without any break. A good approach would have been to design special training modules and pilot test in various departments/ ministries including Pakistan Administrative Staff College and National Institute of Public Administration. Moreover, the target regarding producing the national level SOE report by the Pak EPA seems unclear as after the 18th Constitutional Amendment 2010, the Pak EPA was confined to the federal territory and was no more responsible for inter-provincial coordination and producing National level State of Environment Report. Therefore, after the 18th amendment only Islamabad Capital Territory (ICT) level State of Environment Report could be produced by the federal EPA. The revised PRF and the addendum to the project document though propose that the national SOE report should be coordinated by the environment and climate change wing of MoCC instead of Pak EPA, however, after the 18th amendment the coordination role of the Environment and Climate Change wing with the provinces is also not clear.

4.1.2 Assumptions and Risks

The project has appropriately identified and described key assumptions and risks in sections-A2, D3.c and the project results framework/ logical framework. Mitigating actions are also provided for key risks and assumptions under section D3.c. An updated risk log was also prepared during the project inception phase and provided in the inception report. Major risks involved are weak coordination among stakeholders especially between federal and provincial organizations, and lack of ownership among the key stakeholders. The project is based mainly on two key assumptions; 1) most of the EMIS work is done by the NEMIS project and the GGEB project is to take it further; 2). there is agreement between the MoCC and PBS, and Provincial Bureaus of Statistics and the provincial line departments for smooth and regular data sharing. The project shows too much dependence on the work done under the NEMIS and Geomatic Projects, which did not sustain themselves (e.g., PRF Objective indicator-1 and Outcome-2 indicator-1, 3). Moreover, a key risk of outdated IT (Software and Hardware) is not mentioned, though some measures provided in the project document in the form of ensuring future improvement of the EMIS. Major risks and assumptions, and their mitigation actions provided in the project document and inception report and their current status are summarized in table-5 below.

Table 5: Major assumptions and risks, mitigation actions and their status

Key assumptions and risks	Proposed mitigation actions	Current status
Weak coordination among provinces and federal authorities due to the 18 th Constitutional Amendment 2010.	<ol style="list-style-type: none"> 1. Direct allocation of funds to the component leads for effective implementation; 2. Establishment of project executive committee, component coordination committees, and implementation committees for 	<ol style="list-style-type: none"> 1. Funds were not transferred to the component leads. All expenses were done by the PMU. 2. PSC established at federal level; no formal component coordination committees could be established. The component

Key assumptions and risks	Proposed mitigation actions	Current status
	<p>ensuring effective coordination and;</p> <p>3. MoUs among the key implementing partners at the federal and provincial level to address any residual questions of compliance, coordination and reporting.</p>	<p>leads held informal meetings with line departments.</p> <p>3. No MoUs/ agreements signed. However, focal points were nominated for the GGEB projects. (Likelihood of the risk is still high)</p>
<p>Institutional and capacity building project are relatively less attractive in Pakistan (Competing priorities at national and provincial levels may reduce political and financial support for Generating Global Environmental Benefits from Improved Decision-Making Systems and Local Planning in Pakistan.)</p>	<p>1. Leveraging existing structures than creating new ones;</p> <p>2. Value addition to the existing structures of all implementation partners;</p> <p>3. Cultivation of deeper ownership of the project and its outcomes, among the relevant stakeholders, during the course of implementation.</p>	<p>1. Existing positions are used for the GGEB project. Focal points (component leads) identified. Component leads in PBS, P&Ds, and KP EPA are assisted by their assistants (Statistical Officer in PBS, Asst. Chiefs in P&Ds, Deputy Director EPA)</p> <p>2. Trainings provided to the component leads and their assistants;</p> <p>3. Capacity building, sensitization and awareness events organized for representatives from targeted government organizations and politicians. (Overall, there is increasing priority among development professionals including politicians during the current government. Major environmental initiatives of the present government are the key indicators)</p>
<p>The development lobby's fear of delay and increase in cost of developmental projects due to mainstreaming environment.</p>	<p>1. Sensitize and develop the capacity of senior government officials as well as to engage parliamentarians and media about mainstreaming environment in the development stream.</p> <p>2. Development of knowledge base and instituting information systems.</p>	<p>1. Capacity building, sensitization and awareness events organized for representatives from targeted government organizations and politicians.</p> <p>2. Studies conducted on various aspects of data generation, compilation and information sharing, and best practices. Reports developed and shared. Knowledge products such as documentaries and awareness material and their dissemination still need attention. (The risk could have been further minimized by effective advocacy through environmental NGOs)</p>
<p>Most of the spadework has already been done, and that it wouldn't take much of the project's resources to have</p>	<p>1. MoUs among the key implementing partners at the federal and provincial level to adopt and follow the</p>	<p>1. No MoUs/ agreements signed. However, focal points were nominated for the GGEB projects. Understanding</p>

Key assumptions and risks	Proposed mitigation actions	Current status
the EMIS pending outputs reach fruition (assumption).	environmental reporting framework.	developed during meetings and through correspondence. (The project document and the inception report acknowledge that due to the 18 th Amendment the NEMIS project work was not sustainable. The web portal/ server handed over to COMSATS University under NEMIS project is not working. The software under the Geomatic project is also outdated. The inception report also proposed that the environmental data requirements would be determined through the relevant departments afresh rather than as determined by NEMIS project.)

4.1.3 Lessons from other relevant projects (e.g., same focal area) incorporated into project design

The project document gives a detailed overview of several relevant projects and their works under section D.2.a. and F1. The project document gives detailed overview of the existing works such as data systems and sources, existing information systems and gaps, integration of environment and development, and the existing capacities regarding EMIS and integration of environment and development. The projects mentioned in the GGEB project document include NEMIS Project, Geomatic project, Pakistan wetlands project, clearance house mechanism, and efforts made under these projects such as the framework of indicators for harmonized data collection and reporting, the (92) environmental data indicators and (435) variables, the first draft SoE report, and the hard and software developed under these projects, including sustainability issues of the NEMIS project.

4.1.4 Planned stakeholder participation

The GGEB project document gives detailed account of the stakeholders' consultation process carried out, both at the federal and provincial level, during the project preparation. The consultation process involved individual and group meetings, workshops, phone calls and site visits with government agencies and civil society organizations. As mentioned in the ProDoc the key stakeholders consulted mainly included organizations that had some role in implementation of the project, provision of data and information and use of the generated data and information. Contribution from key stakeholders was taken in to account in a progressive manner starting from federal level consultation and progressing towards provincial consultation and validation and then finally validation at national level.

As mentioned under section-3.8 key stakeholders and their roles in the project as well as the EMIS have been elaborated in the GGEB project document and its Annex-5. These mainly include federal government ministries and organizations, provincial government line departments and organizations, development functionaries, politicians, national and provincial training institutions, academia, media representatives, and environmental NGOs and thinktanks. Participation of the major stakeholders has been ensured as implementation partners, data and information providers, EMIS coordination bodies, producers of environmental statistics, and technical and research service providers. Perspectives of these stakeholders

were incorporated in the project design. Stakeholders having key roles and responsibilities in the project implementation and further continuity of the EMIS were involved in the entire process incorporating their input regarding gaps and issues related to EMIS, and mainstreaming environment considerations in development, recommended measures and implementation arrangement. Stakeholders having roles in environmental collection and generation of environmental data and information such as provincial line agencies, environmental NGOs etc. were also consulted and their input regarding data collection methods, tools and techniques including data sharing was also incorporated in the project design. Other line ministries and departments working on development projects were also consulted and their input regarding availability of information for environmental consideration in development projects as well as their understanding and capacities was also incorporated in the project design.

The project also gives detailed stakeholders' participation mechanism in the form of holding a project inception workshop engaging all of the key stakeholders, project executive committee (Project Steering Committee), Provincial Implementation and Coordination Committees and organization of different events, workshops, seminars and round table conferences. Representation of key stakeholders in all of the project committees has also been well elaborated.

4.1.5 Linkages between project and other interventions within the sector

Under its section F1 (Core Commitment and Linkages) GGEB project document elaborates linkages between the project and other interventions within the environment sector both at international and national level covering, more or less, the objectives of the GGEB project. These include the following;

- UNDP's international projects like the 3-year 'Biodiversity Planning Project' in Zimbabwe focusing on integrating Zimbabwe obligations under the CBD into its national development and sector planning framework;
- MoCC's projects like Conservation of Habitats and Species in Baluchistan, Mainstreaming Biodiversity Conservation into Production Systems in the Juniper Forest Ecosystem and the Protection and Management of Pakistan's Wetlands Project, co-financed with the Netherlands, and the GEF supported Mountain and Markets Project. These projects were building partnerships among UNDP, federal and provincial/territorial government agencies, NGOs including Aga Khan Rural Support Programme (AKRSP), IUCN, WWF and others.
- Completed projects like Mountain Areas Conservancy Project (1999-2007), the National environmental Management Information Systems (NEMIS) project. The NEMIS project was implemented with funds from the Netherlands, UNDP and Government of Pakistan (2005-2012). NEMIS work has been more relevant to the GGEB project work.
- Projects mentioned under the Pakistan's Annual Development Plan (2014-15) highlighting the importance of sustainable growth through integration of environmental considerations in development:
 - Establishment of Environment Section in Planning & Development Division. (Islamabad)
 - Establishing National Multilateral Environmental (MEAs) Secretariat (Islamabad)
 - Establishment of Clean Development Mechanism Cell (Islamabad)
 - Establishing of National Bio-safety Centre (NBC) Project, (Islamabad)
 - Sustainable Land Management Project Phase-1, (Islamabad)
 - Development and Implementation of Water and Sanitation Management Information system in Pakistan
 - Establishment of Centre for Sustainable Organization

- Establishment of Geometric Center for Climate Change and Sustainable Development 2012-2015, (Islamabad)
- Indoor Air Quality in Buildings

4.1.6 Gender responsiveness of project design

Though the GGEB project is mainly gender neutral, however women were effectively involved during the project formulation and the project document recommended measures to mainstream gender in sustainable development. One of the project development consultants was a woman. Regarding gender responsiveness the recommended measures include; a) Involve in the EMIS organization that hold and produce information on gender issues; b) Design data collection tools that report gender segregated information as much as possible; c) Ensure eligible women participants are actively enlisted for participation in various training and awareness raising workshops; d) Engage women experts, where possible, for delivering the required training and educational lectures and workshops; e) National and Provincial State of Environment reports carry relevant gender data; f) Ensure research and policy components include addressing some key gender issues under the three Rio conventions; g) Engage eligible women researchers and policy professional for undertaking policy research studies under the project; h) Include female students in the internship and fellowship activities in the target partner universities i) Make the Country Reports under Rio Conventions more inclusive of the relevant gender issues; j) Involve women parliamentarians in the activities under the component of engaged polity; k) Target the media support component such that it targets women issues and leverage participation and support of women journalists and media professionals for the purpose.

4.2 Project Implementation

4.2.1 Adaptive management (changes to the project design and project outputs during implementation)

Due to some contextual changes during the period between March 2016 (signing of the project document) to March 2018 (approval of the PC-1) the project document was fine-tuned in line with the contemporary national context. Accordingly, some changes were made at the output level and the activities were tuned to the changed context while the outcomes and their associated indicators were kept unchanged. The changes were reflected in the inception report, addendum to the project document, and the revised Project Results Framework and the Project Inception Report. These changes are summarized below.

Changes made in the outputs and activities

- Activity under output 1.1 “Review of the current system of collection, processing and dissemination of environmental information in relevant institutions” was elaborated mentioning the current institutions. “The institutions at federal level include EPA, MoCC, Bureau of Statistics and P&D Division whereas at KP the institutions will include EPA, Environment Department including Forestry and Wildlife, Industries, Energy and Transport Departments. In Punjab these will include Environment Protection Department, Forest and Wildlife departments, Industry and Transport, Energy Department departments. In both provinces these departments channel the information to the respective bureau of statistics under the overall umbrella of Planning and Development Departments.”
- Additional input from the project management was provided for the activity under output-1.4 regarding “development and signing of agreement between Ministry of Climate Change and

Pakistan Bureau of Statistics for joint cooperation with clear terms of partnership”. “The project management will draft the clear terms of partnership in line with the revised scope of the project.”

- Output 1.3 “A Report of Bench Marking of Environmental Statistics of Pakistan with the NEMIS Identified Environmental Data Requirement” was rephrased as “Report of Bench Marking of Environmental Statistics of Pakistan with Environmental Data Requirement”. “The environmental data requirements were to be determined through the relevant departments afresh rather than as determined by NEMIS as the situation on the ground had changed substantially due to devolution and other changes in the institutions.”
- Output 1.5 and 1.7 were clubbed together and both were merged: The target under 1.5 was to include “clarifying or freshly establishing the mandate for collecting left over essential data that Bureau of Statistics is unable to internalize in their system”. “Output 1.5 and 1.7 were rephrased as “Reformed Data Collection Tools and Approaches and clarified mandate for residual data collection”
- Number of “Output-1.8: Protocols of Quality Assurance of Environment Data” was changed as “Output 1.7: Protocols of Quality Assurance of Environment Data”
- Output 2.4 and 2.5 were merged together and the activities were clubbed together under output 2.4. “Output-2.4: Provincial State of Environment Reports including benchmarking with National State of the Environment report”. Moreover, the support for production of the three Rio Conventions (CBD, UNCCD, UNFCCC) was also elaborated including doubling the existing allocation for this output.
- Outputs-3.4 and 3.5 were also combined as “Output 3.4: Supportive Public Opinion through Media Support”.
- Due to mushrooming TV channels and TV dramas, the intervention of TV dramas was suggested to be reconsidered and preferably replaced with a more promising, yet flexible intervention. The project management was advised to adopt a cohesive communication strategy with relevant partnership arrangements.

Changes made in the management arrangements

- The project management committees were reduced from eight (one project executive committee and seven implementation committees (three at federal and four at provincial levels) to three committees, the project steering committee at the top with two provinces level project committees each for Khyber Pakhtunkhwa and Punjab. According to the original project document the seven implementation and coordination committees were not only aimed at implementation and coordination of the entire steps involved in the EMIS (data collection, compilation, information generation and sharing including storage and retrieval) during the project life but also smooth continuation and sustainability of the EMIS in future. If not seven at least there should have been three implementation and coordination committees that would continue even after the winding up of the project.
- A more pronounced role will be given in the implementation to the Directorate General of Environment, MoCC (as coordinator of the substance of the project, whereas the NPD will resume only management role). This is a well justified change and could resolve the issue of frequent changes of the NPDs (as in the case of the GGEB NPDs were changed for seven times).
- The inception report provides only three key project positions; The National Project Director, the National Project Coordinator, and the Assistant Project Officer. No explanation provided in the

inception report or in the addendum to the project document whether other positions of Component Coordinators provided in the original project document would be engaged or not.

- The inception report also mentions a revised list of project stakeholders. The institutions at federal level include EPA, MoCC, Bureau of Statistics and Planning Division whereas at KP the institutions will include EPA, Environment Department including Forestry and Wildlife, Industries, Energy and Transport Departments. In Punjab these will include Environment Protection Department, Forest and Wildlife departments, Industry and Transport, Energy Department departments.

Other changes during implementation

- In addition to changes during the inception phase, some adjustments were also made by the project management during the project implementation. These include adopting of virtual means of holding workshops, seminars and trainings during Covid-19 pandemic and engaging a female project assistant and a male admin and finance officer on consultancy contract (to cover the gaps in PMU staff).

4.2.2 Actual stakeholder participation and partnership arrangements

As compared with the original project document as well as the inception report, stakeholders' participation was confined to main IPs, line departments and academia. Participation of some of the key stakeholders remained low. These include line departments like wildlife, agriculture, industry, transport, and energy departments, and NGOs like WWF and IUCN. These stakeholders collect and compile environmental data and information in their respective sectors and fields of operation. Moreover, some of these organisations such as WWF and IUCN have very useful and reliable environmental data and have past experience in developing environmental databases and portals. Their engagement could have enhanced availability and quality assurance of environmental data and information for the EMIS.

MoUs with key stakeholders as elaborated in the project document and also in the inception report were not finalized both at federal and provincial levels. The project management substituted the MoUs with the nomination of focal persons from key stakeholders/ IPs (i.e., Pak EPA, PBS, Punjab Planning and Development Board, KP P&D Department, KP EPA, Punjab Forest Department, KP Forest Department and the Department of Environmental Sciences, University of Peshawar). Only MoU with the Department of Environmental Sciences, University of Peshawar was finalized. Also, as mentioned earlier, formal implementation and coordination bodies were not established. Though the project management and their key IPs tried to fill these gaps through their existing linkages and contacts, however formal agreements and coordination structures are very much needed for future sustainability.

Participation of women in project decision making, implementation, and as beneficiaries remained satisfactory. The project management tried to ensure good representation of females in their activities. These included women as members of the Project Steering Committee, focal points of IPs, project staff, interns and participants of training, awareness raising and consultation workshops. Moreover, a separate workshop for female students and faculty was organized at FJWU. However, keeping in view the high caliber of the FJWU especially its environmental sciences department should have been engaged in further research and capacity building activities.

Participation of stakeholders in training, consultation and awareness events has been good and encouraging. Various events organized under the GGEB project engaged stakeholders from almost all the stakeholders mentioned in the project document and the inception report.

The project management tried their best to establish partnerships with stakeholders and projects. These include partnerships with the Department of Environmental Sciences, University of Peshawar; Fatima Jinnah Women University Rawalpindi; Balochistan University of Information Technology, Engineering and Management Sciences; Faisalabad Agriculture University; Nadirshaw Edulji Dinshaw (NED) University, Karachi; University of Turbat-Gwadar, Balochistan; National Cleaner Production Center (NCPC) Rawalpindi; Pakistan Planning and Management Institute (PPMI) Islamabad, and; Glacial Lakes Outburst Flood Risk Reduction Project (GLOF-II Project) of the MoCC. Most of these partnerships confined mainly to the capacity building, and awareness activities.

4.2.3 Project Finance and Co-finance

The GGEB project is a medium sized project of the GEF-5 programme cycle. The total cost of the project is USD 1,935,550 out of which the GEF financing is USD 995,500 (cash), GOP's financing is USD 722,350 (cash/ in kind), and UNDP's financing is USD 217,700 (cash/ in kind) (Table-6, 7 and 8).

Releases of GEF funds and UNDP's co-financing were found according to commitment. Out of the total GEF committed funds of USD 995,500 the expenditure till December 2021 was USD 844,829 (84.86%). The remaining balance of USD150,671 is planned till Mar 2022. Similarly, out of the total UNDP's committed parallel co-finance of USD 217,700 the expenditure till December 2021 was USD 185,386 (78.41%). The remaining balance of USD 32,314 is planned till Mar 2022. Issues were found in fulfilling the GoP parallel financing. No funds provided out of the total committed co-financing (parallel) USD 636,350. Major reason was that the staff at the component implementing partners could not be hired due to lack of clarity in the revised changes to the project document (inception report and addendum). However, in-kind co-financing in terms of time cost, office cost and resources used for the GGEB project has been encouraging. A total of USD 89,926 out of the planned USD 86,000 (105%) has been provided in this regard. Financial delivery of the GGEB project (GEF and UNDP financing) was encouraging throughout the project life. As of Dec 2021, the overall financial delivery remained 84%; 100% in 2017-18; 92% in 2019, 65% in 2020 and 93% in 2021. The low financial delivery in 2020 was mainly due to the Covid-19 pandemic.

Table 6: Yearwise status of planned budget & Expenditures till end of 2021

Donor	Donor Contribution	2017-18		2019		2020		2021		Total			2022 Planned
		Planned	Expended	Planned	Expended	Planned	Expended	Planned	Expended	Planned	Expended	%	
00012 - UNDP	217,700	96,428	96,428	40,000	38,942	40,000	13,328	60,000	36,688	236,428	185,386	78	32,314
10003 - GEF	995,500	50,886	50,886	267,967	243,185	385,704	262,187	290,941	288,571	995,498	844,829	85	150,671
Grand Total		147,314	147,314	307,967	282,127	425,704	275,515	350,941	325,259	1,231,926	1,030,215	84	182,985

Source: Environment and Climate Change Unit, UNDP-Pakistan Country Office

Table 7: Status of GGEB commitments till Dec 2021

Co-financing (type/source)	UNDP financing (US\$)		Government (US\$)		Partner agencies (US\$)		Total (US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants	217,700	185,386	636,350	0			854,050	185,386
Loans/Concessions	-	-	-	-	-	-	-	-
In-kind support	-	-	86,000	89,926	-	-	86,000	89,926
Other	-	-	-	-	-	-	-	-
Totals							940,050	275,312

Note: The UNDP's balance co-financing is planned till March 2022

Table 8: Confirmed Sources of Co-Financing at TE Stage

Sources of Co-Financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount (US\$)
GEF Agency	UNDP	Grant	Recurrent cost	185,386
Recipient Country Gov't	Federal and provincial gov'ts	Grant	Investment mobilized	0
		In-Kind	Recurrent cost	89,926
Sub-total (Grant)				185,386
Sub-total (in-kind)				89,926
Total co-financing				275,312

Note: The UNDP's balance co-financing is planned till March 2022. The Gov't's in-kind co-financing will increase till March 2022 (project's closing date)

4.2.4 Monitoring & Evaluation: design at entry, implementation, and overall assessment of M&E

4.2.4.1 M&E design at entry

(Rating: 5 = Satisfactory (S))

The GGEB project document provides detailed Monitoring and Evaluation framework for the project including inception workshop, key M&E events and responsibilities, M&E plan and indicative budget, and an elaborated project results framework (logical framework) under “Sections D.5.a, b, c, d, e, f g, and h”. A summary of the M&E plan is presented as under.

- **Project Inception (Workshop):** Aims, objectives and structure of the inception workshop have been provided, Moreover, outline of the inception workshop has also been provided in the document.
- **Key M&E Events and Responsibilities:** This section outlines the role of the Project Executive Committee/ Project Steering Committee in M&E, role of the National Project Coordinator, roles of the Project Component Coordinators, role of the UNDP Country Office, and a Tripartite Project Review (TPR). Overall responsibility of carrying out the project monitoring rest with the National Project Coordinator supported by the Assistant Project Officer and the respective component leads (focal persons).
- **Project Reporting:** The project document also outlines the types and frequency of project reporting. These include Project Inception Report, Quarterly Progress Reports (and updating of Project Risk Log), Annual Project (APR), Technical Reports (as identified), and Project Terminal Report.
- **Evaluations:** These include independent mid-term and terminal evaluations.
- **Monitoring and Evaluation Work Plan, Indicative Budget and Project Results Framework:** In addition to the above the M&E section also provides Monitoring and Evaluation Work Plan and Indicative Budget. The total indicative budget of the M&E is USD 43,000. The workplan covers the following activities:
 - Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)
 - Quarterly/Half Yearly progress reports and operational reports
 - APR
 - Tripartite Review (TPR) and TPR report
 - Project Executive Committee meetings
 - Mid-term Evaluation
 - Final External Evaluation
 - Terminal Report
 - Audits
 - Visits to field sites (UNDP staff travel costs to be charged to IA fees)
- **Project Results Framework/ Logical framework:** A detailed Project Results Framework having indicators, baseline, targets, means of verification and assumptions and risks at objective, outcomes and output levels has been provided in the Project Document with a total of 17 objective and outcome level indicators (05 objective indicators, and 12 outcome indicators).

- The PRF was revised at the inception stage, making output level changes (already detailed in this report). The revised project logical framework/ project results framework is given as Annex-8 to this report.

4.2.4.2 M&E Implementation

After reviewing the project documents, Annual Work Plans (AWPs), Annual Project Reports (APRs), inception report, other technical reports and UNDP-CO reports as well as discussions with the project team, UNDP CO team and the IPs the status of the M&E implementation is described as under.

Project Inception (Workshop): The inception workshop was held on 18 December 2018 following the agenda outlined in the project document. The workshop was participated by all key stakeholders and necessary changes adjustments made in the project outputs and activities, management arrangements, and risk log including development of the first AWP.

Establishment and operationalization of project committees: In the original project document a total of seven different committees were proposed. These included a Project Executive Committee/ Project Steering Committee, two federal level implementation committees and four provincial level implementation committees. These were reduced to three committees i.e., a federal level Project Executive Committee/ Project Steering Committee and two provincial implementation committees (one each in KP and Punjab P&Ds). The Project Steering Committee has been established and has conducted three meetings. While, the two provincial committees could not be established formally, however as informed by the project management the focal persons at KP P&D Department and Punjab Planning and Development Board have been holding their coordination and review meetings with relevant line departments. No formal evidence such as minutes or Notes for Record (NFRs) of the provincial level meetings were shared with the consultant.

Project Reporting: Project reporting has been regularly done. All the Quarterly Progress Reports (QPRs), APRs were properly prepared and are available. APRs for the period of Mar-June 2019, Jul 2019-June 2020 and Jul 2020-June 2021 are shared with the TE consultant. QPRs for 2019, 2020 and 2021 (two quarters) were also shared. All these APRs and QPRs were shared along with the review comments from the regional office. Technical reports generated as a result of various events carried out and studies conducted under the project are developed and shared with the consultant. In addition to these the project team also shared all the AWPs duly approved by the concerned authorities. These included AWP 2019, AWP 2020 and AWP 2021.

Participation of the project and UNDP-CO teams in project activities (events/ meetings): From the lists of participants of various meetings, events and site visits, it is quite evident that participation of project and UNDP CO teams has been overall good. Participation of the project and UNDP CO teams in the PSC meetings has been 100%. The project team comprising of the National Project Coordinator, and Assistant Project Officer have been present in almost all of the project meetings, events and site visits. Similarly, the UNDP CO team (ARR, Sr. Programme Officer and Programme Associate) also attended some project events held in Rawalpindi, and Karachi. Their participation in the project activities is overall satisfactory.

Rating: 4 = Moderately Satisfactory (MS)

4.2.4.3 Overall M&E

The overall M&E rating is: **Rating: 4 = Moderately Satisfactory (MS)**

4.2.5 UNDP implementation/oversight and Implementing Partner execution, overall project implementation/execution, coordination, and operational issues

4.2.5.1 UNDP implementation/oversight

UNDP Country Office oversight regarding the GGEB project remained satisfactory. The UNDP CO team participated in the GGEB sample interventions such as workshops/ seminars and meetings, conducted field visits, and conducted spot-checks and HACT audits through a third part. Moreover, the UNDP regional office/ Regional Technical Advisor (RTA) also remained engaged with the project team and the UNDP CO.

- During the initial phases of the project role of UNDP CO has been very active to develop clarities with the MoCC and EAD on the GoP's guidelines for implementation of NIM Projects in Pakistan. The ARR and Sr. Programme Officer conducted several meetings with the MoCC, EAD and the project team. All these efforts remained successful and a final understanding was reached to smoothly implement the GGEB project.
- UNDP CO office also participated in the initial review and adjustments of the GGEB project document.
- The ARR, Sr. Programme Officer and programme associate attended the inception workshop on 18 Dec 2018. The Sr. Programme Officer coordinated the workshop.
- The ARR and the Programme Associate attend the Project Review Meeting on 08 Nov 2020.
- Monitoring visit to GEB PMU office was conducted by the Sr. Programme Officer on 11 September 2020 (field monitoring report shared).
- HACT audit was also conducted by the UNDP CO through a third party on 31 December 2020 (report shared).
- Spot-check was conducted by the UNDP CO through a third party on 20 August 2021 (report shared).
- Review of the AWP's and the APRs was also done and comments provided both by the RTA and the ECCU (UNDP CO).

Rating: 5 = Satisfactory (S)

4.2.5.2 Implementing Partner execution

MoCC is the lead IP and executing agency responsible for overseeing successful execution of the project and coordinating its implementation across the participating sectors, provinces and entities. Moreover, being a key stakeholder MoCC was also responsible for delivering certain specific outputs related to multilateral environmental agreements, and mobilizing the public opinion for environment-development integration. Pak EPA as a unit of the MoCC has the overall coordinating partner of the project. The project has Component Implementation Partners both at federal and provincial levels. These include the Pakistan Bureau of Statistics at the federal level, KP P&D and Punjab Planning and Development Board (along with their provincial Bureaus of Statistics). Generally, these roles were implemented, however some issues and gaps were found limiting the IPs' execution and implementation roles. These included initial delays (due to hiring and rehiring of staff, procedural issues and approval of the PC-1), frequent changes of the NPDs, changes in the overall EMIS coordinating body (Pak EPA-Environment and Climate Change Unit-Pak EPA), and lack of formal MoUs with PBS, P&Ds, Provincial EPAs. These further resulted in low coordination among the IPs and their partners and limited ownership for the GGEB work among the IPs.

Rating: 4 = Moderately Satisfactory (MS)

4.2.5.3 Overall project implementation/execution, coordination, and operational issues

Rating: 4 = Moderately Satisfactory (MS)

Keeping in view the above situation regarding the UNDP CO oversight and the IPs execution of the project, the overall project implementation/ execution generally remained moderately satisfactory. However, some issues had negative impact on the overall coordination and ownership of the project activities.

- **Delays due to development and approval of PC-1:** It took almost two years (March 2016 to March 2018) to develop and get the project PC-1 (a government project document) approved. According to the GoP procedure to implement the NIM projects in Pakistan a PC-1 is required alongside the donor approved project document. This is a time consuming and duplication of process. A more pragmatic approach needs to be adopted to avoid unnecessary delays. A more realistic and desirable approach would have been to abandon the requirement of the PC-1 for small and medium size projects, however keeping in view the lengthy process it would be desirable to initiate the process of PC-1 development alongside the ProDoc development right from the proposal development stage.
- **Frequent changes of NPDs:** The IPs' involvement in implementation was mainly carried out through the National Project Director. As elaborated under section 3.3 of this report the GGEB project suffered from frequent changes of NPDs resulting in changes in signatories and delays in PSC meetings, approval of the AWP and project delivery especially during 2020. During the period from Jan 2019 to July 2021 the NPDs were changed for six times. The inception report and the addendum to the project document suggested a good option to resolve the issue of changes of NPDs. These documents suggested that a more pronounced role in the implementation should be given to the Directorate General of Environment, MoCC while the NPD should resume only the management role.
- **Changes in the overall EMIS coordinating body:** According to the original project document the overall EMIS coordinating body was the Pak EPA, which in the inception report was changed to the Environment and Climate Change Unit of the MoCC. Now, at the terminal evaluation stage the EMIS coordination body is again the Pak EPA. These changes have affected the ownership and commitment for the EMIS as their capacity building process. The IP should have stuck to one coordinating body giving them ample time to understand the task, build its capacity and implement it successfully.
- **Changes in the implementation arrangements:** According to the original project document each component IP was to implement its component independently by developing its own work plan and having its own budget. However, this modality was not adopted due to the reason (as stated by the project team) that opening of independent sub-project accounts for each sub-component was difficult, as the project already suffered from delays opening the GGEB main project account. However, these changes also affected the ownership of the component IPs. A more practical approach would have been close coordination and support to the IPs in opening their accounts and active engagement in the implementation.
- **Lack of provincial implementation and coordination committees:** Coordination among the provincial component leads and the concerned line departments and agencies was affected by lack of the implementation and coordination committees. Seven implementation and coordination committees were proposed in the original project document, however during the inception phase these were reduced to two (one each in KP P&D and Punjab P&D). These were not only aimed at implementation and coordination of the entire steps involved in the EMIS (data collection, compilation, information

generation and sharing including storage and retrieval) during the project life but also smooth continuation and sustainability of the EMIS in future. A close follow up on the part of the project PMU would have ensured the establishment of these committees and thus effective coordination among the provincial departments and other stakeholders.

- **Limited staff at PMU and lack of clarity in staff engagement at the IPs:** The original project design provides less staff at the PMU while some staff with the component leads (dedicated coordinators and IT professionals) are provided. However, the inception report does not mention anything whether these positions were abolished or not. This uncertain situation resulted in just nomination of the focal persons as coordinators and their assistants as their assistants for supporting the focal persons. These focal persons already overburdened with their existing responsibilities could not give much time to the GGEB activities. Though, the PMU engaged some staff members (project assistant and admin and finance officer) on individual consultancy basis, the gap still existed at the component IPs level. This besides negative impact on the coordination aspects also affected co-financing contribution of the provincial governments.
- **Delays in transfer of advance funds to the PMU:** As reported by the project staff, also mentioned in the APR delays occurred in transfer of funds due to audit observations on the MoCC's NIM projects, though observations of GGEB project were in the range of low to medium level. This situation also resulted in delays in implementation. However, a more proactive approach by both the MoCC and the UNDP Country Office resulted in resolving the issue.

4.2.6 Risk Management, including SES

The Project Document gives detailed account of different risks associated to project implementation. These have been given in the project results framework/ logical framework and also described under section "D.3.c. Key Risks and Assumption" of the project document. Moreover, a SES Plan was also developed and implemented during the project implementation.

- **Identification and reporting of new risks**

Except some implementation related issues and challenges, no critical/ high risks were identified and reported during 2019, 2020 and 2021.

- **Response to the identified risks**

Response to the Social and Environmental risks as identified in the SES Plan has been good. Almost all of the recommended measures were implemented both at the project design and implementation stages. Detailed assessment of SES Plan is given under section "4.3.7 Social and Environmental Standards" of this report. Issues and challenges during implementation (also mentioned in the PRF as risks/ assumptions) were responded and reported in the APR as well as to the PSC. These include;

- Issues related to availability of updated and reliable environment related data: The response including use of existing agreements between the Ministry of Climate Change (MoCC) and relevant organizations for updating and sharing of data;
- Issues in nomination and participation of relevant government officials in the project training activities and workshops: Close coordination and liaison of the project staff with the concerned departments and ministries.
 - The Covid-19 pandemic resulting in delays: Changes in implementation approach and plans.

However, due to changes in the implementation approach risks related to effective coordination were not properly addressed. Under section “D.3.c. Key Risks and Assumptions” para 177 of the ProDoc a key risk regarding coordination among the federal and provincial organisations due to the 18th constitutional amendment was well identified and mitigation measures described. Some of the recommended measures such as allocation of funds to the component IPs and their independent implementation, establishment of the component coordination committees and signing of MoUs could not be implemented.

4.3 Project Results

4.3.1 Progress towards objective

The progress towards objective and expected outcomes was evaluated using a three-pronged approach i.e., self-assessment of the project team regarding their achievements, reviewing the project AWP and APRs and finally interviews and discussions with the project team, UNDP CO team, IPs and other stakeholders. A final picture till end of December 2021 is presented below and also outlined in Annex-4.

Objective indicator-1. An Environmental Information Management System for Pakistan developed under the EMIS project is functioning effectively and sustainably: Three targets were planned under this indicator; 1.1. EMIS for Pakistan fully operational; 1.2. Environmental reporting (variables & indicators) framework approved & adopted, and 1.3. Three annual State of environment (SOE) reports each for Pakistan, Punjab and KP published. Following progress has been made towards these targets.

1.1. EMIS for Pakistan fully operational

- **Progress achieved:** Technical, institutional, and IT frameworks for EMIS were developed. Consultant for development of the web portal has been engaged. The EMIS is planned to be operational by end of the project in collaboration with Pak-EPA.
- **Findings:** The progress was verified. Relevant report was shared with the TE consultant. IT consultant and DG Pak EPA were interviewed. Capacity of Pak EPA was found low to sustain the EMIS. The server procured under the Geomatic Project was reported outdated and needed upgradation. There is only one IT expert engaged on short-term basis, however his services are needed for longer term. Support from the GGEB project regarding upgradation of server, provision of licenced GIS software and design and installation of EMIS software are planned. Active follow up and liaison by the project team especially the NPC need to be done to ensure completion of the remaining tasks. According to the IT design report in-premises server is an outdated and expensive concept and is being increasingly replaced by the cloud-based servers. Though, due to limited time and GoP’s procurement and procedural issues, this option could not be adopted under the GGEB project, however the Pak EPA may consider this option in future to avoid unnecessary operation, maintenance and data security issues. The target is on track and is likely to be completed by end of the project.

1.2. Environmental reporting (variables & indicators) framework approved & adopted

- **Progress achieved:** The study is conducted and list of indicators and variables have been defined.
- **Findings:** The progress was verified. Report on “Identification and finalization of indicators for EMIS” was shared. Assistant to focal person (second-in-command) in PBS was interviewed. Final approval and adoption of the framework is yet to be done. It’s not certain whether the PBS and others would accept and adopt the framework for data collection and compilation for reports especially collection of data on residual indicators. As no formal agreement exists between PBS and MoCC a written

commitment is needed from the PBS and provincial IPs regarding their acceptance and adoption of the framework. The target is likely to be achieved.

1.3. Three annual State of environment (SOE) reports each for Pakistan, Punjab and KP published.

- **Progress achieved:** Three SOE reports (one each for ICT, Punjab and KP) are in progress and expected to be complete by Feb 2022
- **Findings:** The project management has changed its strategy. The existing draft SOE report of the Pak EPA is to be updated and published. For Punjab and KP only “guidelines for SOE Reporting” have been developed and shared with the Punjab P&D Board and KP EPA. Due to changes in higher management at KP EPA, progress on the updating and publishing of the SOE Report / Environment Profile of KP could not be made (verified during the interviews). Status of progress on the Punjab SOE report is also not clear. The target will be partially achieved and only one SOE report at ICT/ federal level is likely to be developed and published.

Objective indicator-2: Enhanced capacities for integrating environment in economic development by the Government of Pakistan as well as the provinces of Punjab and KP: Three targets were planned under this indicator including; 2.1. Planning and development functions in the government of Pakistan, Punjab and KP have enhanced access to environmental knowledge and capacity; 2.2. About 400 officers or more from ministries or departments dealing with economic development, at the federal and provincial level in Punjab and KP have basic training and exposure to the essentials of environment and development, and; 2.3. One or more professional networks of environmental experts is in place and accessible to P&D Board and P&D departments in Punjab and KP to help in environmental reviews of development projects. Progress towards these indicators is described below.

2.1. Planning and development functions in the government of Pakistan, Punjab and KP have enhanced access to environmental knowledge and capacity.

- **Progress achieved:** Engaged officials from P&D Departments in all capacity building activities. Provided technical backstopping to P&D departments for the production of SOE reports. Shared technical studies with P&D.
- **Findings:** The progress regarding capacity building events, and technical backstopping to P&D Departments was verified. List of events, reports, attendance sheets and feedback from participants were shared with the TE consultant and were verified. A total of 26 participants/ beneficiaries of the capacity building events were also interviewed. Satisfaction level of the participants was found mainly high. Reports on different technical studies conducted by GGEB project were also shared with the TE consultant. The target of training 400 officials has been achieved though through a smaller number of events.

2.2. About 400 officers or more from ministries or departments dealing with economic development, at the federal and provincial level in Punjab and KP have basic training and exposure to the essentials of environment and development.

- **Progress achieved:** Total 34 events (12 lectures, 18 Seminars/ workshops/ trainings/ RTCs, 4 on-site visits/ press briefings) conducted.
- **Findings:** Progress was verified. List of events, reports, attendance sheets and feedback from participants were shared with the TE consultant and were verified. Out of 45 planned workshops/

seminars only 18 were conducted. However, the total number of 400 officers was well achieved. A total of 1377 people participated (40% females/ 60% males). A total of 26 participants/ beneficiaries were interviewed. Overall effectiveness of the events was mainly ranked as high.

2.3. One or more professional networks of environmental experts is in place and accessible to P&D Division and P&D departments in Punjab and KP to help in environmental reviews of development projects.

- **Progress achieved:** Two professional networks; one at Fatima Jinnah Women University (FJWU) and another at Dept of Environmental Sciences of University of Peshawar (DES, UoP) are established.
- **Findings:** The progress was verified. Copy of the Letter of Agreement (LoA) was shared. Interview was also conducted at the DES of UoP. LOA was signed only with the DES of the UoP, while LoA with the FJWU could not be signed. However, the target of developing research agenda and conducting 12 research studies was achieved through the research students of the DES of the UoP. The DES of the UoP was also engaged in trainings and workshops. The target is mostly achieved.

Objective indicator-4: A Market mechanism for sourcing and supplying environmental information: The indicator has one target; 3.1. A market-based approach to sustainability in capacity building for environment is successfully pilot tested for replication and scaling up later. Following progress was achieved against this indicator.

3.1. A market-based approach to sustainability in capacity building for environment is successfully pilot tested for replication and scaling up later.

- **Progress achieved:** Two professional networks (one at FJWU and another at DES UoP) established. Research agenda developed and implemented by the DES of UoP. Capacity building activities have also been carried out by following change agent methodology.
- **Findings:** Verified. LoA with DES of UoP shared with the TE consultant. Research reports shared. The capacity building events were supposed to be organized through NIPA. This was not done as proposed in the inception report and revised PRF. The project management tried to take a government services training institute on board however due to some procedural issues they could not be taken on board. Copy of letter to DG Pakistan Planning and Management Institute (PPMI) regarding collaboration for integration of environmental lectures in the PPMI training modules was shared with the TE consultant. The capacity building activities were then carried out inviting key resource persons from line departments and universities. Moreover, collaboration and partnerships were mainly established with universities.

Objective indicator 4. Public Opinion is better informed and more supportive of environmental protection and sustainability: The indicator has one target; 4.1. People across the different economic and demographic strata in Pakistan have a better understanding of the environment and of the need to protect and use it sustainably. Following progress was achieved against this indicator.

4.1. People across the different economic and demographic strata in Pakistan have a better understanding of the environment and of the need to protect and use it sustainably.

- **Progress achieved:** One press briefing and two on-site visits organized for media representatives. Developed knowledge products related to EMIS and environment. These include (i) Brochure (ii) GEB-Updates (iii) Compiled Reports (iv) Factsheets (v) Awareness Raising Material and (vi) documentary.

- **Findings:** The target is partially achieved. Two animated videos, factsheets and compiled project reports were shared. Moreover, the developed awareness material is still under review. Dissemination of these products is also planned to be done through the GGEB project website. GGEB website was checked and only project reports were displayed and were available on demand. According to the inception report TV dramas as proposed in the original project document were suggested to be replaced by a more promising, yet flexible intervention (documentaries), under a cohesive communication strategy with relevant partnership arrangements. The project, however established linkages with the media representatives including TV channels and newspapers through their engagement in awareness events and visits. Good media coverage of GGEB project's events and their messages is reflected in the events reports. Quality of the animated videos need to be improved as well as proper dissemination strategy is needed to ensure that the awareness materials are shared with the target audience. Moreover, feedback on the awareness materials is planned. Keeping in view the limited time left its unlikely that any feedback would be collected on the awareness material. However, feedback plan and methodology should be developed by the GGEB and the Pak EPA should be properly briefed to implement the feedback plan once it assumes the full charge of the EMIS.

Objective indicator-5. Enhanced and sustained political support to mainstream sustainability in economic development: There is one target under this indicator; 5.1. An increasing number of economic development projects benefit from adequate and competent environmental impact assessment that are influential in shaping the design and course of such projects for greater sustainability. Progress against this indicator is as under.

- **Progress achieved:** Two onsite briefings for political fraternity have been arranged thus to sensitize with green economic development and upraise them on the latest information on environmental impact assessments.
- **Findings:** Partially achieved. Onsite briefings conducted and reports shared with the consultant. Only 02 onsite briefings could be organized against the total target of 24. This was mainly due to the Covid-19 pandemic. IRs, IEEs and EIAs are not impacted yet. The KP EPA was already revising and updating the EIAs procedures. The Punjab P&D Board under its Punjab Green Development Programme was planning to restructure and strengthen the Punjab Environment Protection Department including EPA. Moreover, the increasing priority of the current government for environment provided opportunities for the project to impact the developmental projects by integrating the environment. The GGEB project management should have linked their activities with these opportunities. Keeping in view the limited time left, full realization of the intended objective of impacting the process of environmental screening of development projects may not be possible at this stage, what the GGEB management could do is to mention all these options and steps to be taken by the Pak EPA, Provincial EPAs and Provincial P&D Departments.

4.3.2 Rating of progress towards objectives

The progress towards objective is rated as **4 = Moderately Satisfactory (MS)**. As discussed above the progress against the targets for the objective indicators have some gaps especially target 1.2, 1.3 and 1.4, 2.1, 4.1 and 5.1. The project has two more months and can fill in some gaps through the ongoing activities.

4.3.3 Progress towards expected outcomes

GGEB project has three interconnected outcomes; Outcome-1: Availability of Consistent and Reliable Environmental Data; Outcome-2: A Coordinated and Robust Environmental Information Management System, and; Outcome 3: Enhanced commitment and capacity for sustainable development planning and legislation. Progress achieved against these outcomes along with the findings regarding their status, relevance, effectiveness and efficiency are elaborated as under.

4.3.3.1 Progress towards outcome-1

Outcome-1: Regular availability of consistent and reliable environmental data: Outcome-1 aims at strengthening the gathering of primary data, its compilation and flow to a point where it is housed and accessible as a one-stop shop for consistent data to be, at least sourced and referenced by all government plans and reporting for consistency. As per original ProDoc the total planned budget for outcome-1 was USD 80,500.00 while the revised budget was USD 88,056 with an increase of USD 7,556 (9.4%). Outcome-1 has three indicators; 1. Availability of adequate, consistent, reliable and up-to-date data on Pakistan's Environment; 2. Quality and reliability of environment data, and; 3. A compendium of Pakistan's environmental statistics, with enhanced contents, regularly published. As per original project document outcome-1 has eight outputs however, due to changes made during the inception phase these were reduced to seven. These outputs are; Output 1.1: A Unified Collection, Storage and Access System for Primary Data; Output 1.2: An Established List of Priorities for Data Gathering and; Output 1.3: A Report of Bench Marking of Environmental Statistics of Pakistan with Environmental Data Requirement; Output 1.4: An Agreement between the Climate Change Division (CCD) and Pakistan Bureau of Statistics (PBS); Output 1.5: Reformed Data Collection Tools and Approaches and clarified the mandate for residual data collection; Output 1.6: Environment Statistics of Pakistan, and ; Output 1.7: Protocols of Quality Assurance of Environment Data.

Outcome indicator-1. Availability of adequate, consistent, reliable and up-to-date data on Pakistan's Environment: This indicator has one target; A Unified Collection, Storage and Access System for Primary Data managed by Pakistan Bureau of Statistics.

- **Progress achieved:** A total of four studies were conducted under this indicator; Review of the current system of generation, collection and compilation of environmental information in different selected Pakistani departments; Need assessment for the development and access of environmental information system for KP; Review of various EMISs across the globe for exploring best practices; Development of environmental data repository for ICT, Punjab and KP, and; Mapping of stakeholders/departments involved in collection and generation of environmental data and information for ICT, Punjab and KP.
- **Findings:** Verified. Studies conducted. Reports were shared with the TE consultant. The study reported were randomly checked and in general the reports were found ok; however, some errors were found in tow reports. The study regarding “review of current system of generation, collection and compilation of environmental information in different selected Pakistani departments” has some old and outdated information. The data repository report for KP reflects data of GB. Though, a technical review committee comprising IPs and academia was established under the GGEB project to ensure quality of studies (MoCC meeting NFR, dated 04 March 2019). The project team also shared study reports with the committee. Moreover, formal written commitment from the PBS, P&Ds and EPAs

need to be ensured regarding formal adoption of the recommended frameworks and data collection and compilation tools.

Outcome indicator-2. Quality and reliability of environment data: There is one target under this indicator; Quality assurance tools are developed and pilot tested in 4 agencies gathering primary environment data each in Punjab and KP.

- **Progress achieved:** Two activities were reported under this indicator; a. Designed and created an innovative dashboard for selected projects of Ministry of Climate Change (MOCC) for summarizing and reporting their data, which would ultimately allow users to make decisions based on the reliable and up-to-date information, and; b. Identified and finalized environmental indicators for federal, Punjab and KP to support EMIS.
- **Findings:** Verified. Reports were shared. Beta version of the projects' dashboard has been developed; its launching is still to be done. The dashboard development under this outcome indicator does not seem to be relevant, this may come under the capacity building component. As per ProDoc the target is the development, and pilot testing of a set of data quality assurance protocols for selected 4 entities, 2 each in Punjab and KPK, responsible for gathering primary data. The above-mentioned activities are the background steps, however specific QC/QA protocols needed to be developed. The project team could not share any such QC/QA protocols/ tools developed under the project. The second activity conducted is partially relevant. Due to limited time left this activity does not seem to be completed. The project team at least needs to ensure data QC/ QA protocols to be shared with the four entities. A draft could be shared through zoom meetings and their input incorporated in the draft for final adoption and use.

Outcome indicator-3. A compendium of Pakistan's environmental statistics, with enhanced contents, regularly published: Indicator-3 has one target; The Compendium of Environmental Statistics for Pakistan are published regularly every year with improved contents matching the country's environmental reporting requirements.

- **Progress achieved:** Progress achieved under this target includes; a: Study conducted regarding review of the existing protocols adopted by various selected stakeholders/ departments for gathering primary environmental data/mapping exercise of environment sector activities and projects, and; b. Extended support to PBS for publication of compendium 2020.
- **Findings:** Activity verified. Report shared with the TE consultant. Outdated information found in the report. No formal agreement/ MoU was signed with the PBS. The TE consultant was informed that instead of formal agreement/ MoU the project management (MOCC) developed mutual understanding with the PBS through meetings and mutual correspondence for adoption of the improved template for environmental compendium and its publication. This approach was adopted to compensate for the time lost due to the Covid-19 pandemic and initial delays. A consultation process consisting of three Round Table Conferences one each at federal, Punjab and KP level for identification and removing of gaps in the existing protocols and then finalization of those gaps, was not followed. The review paper was supposed to be discussed further in RTCs. The target is achieved partially. Environmental compendium 2020 has been published however by comparing the contents with the 2015 compendium no significant changes were found.

4.3.3.2 Rating-Assessment of Outcome-1 (progress, relevance, effectiveness and overall outcome)

Rating of outcome-1 regarding progress made, its relevance, effectiveness and overall outcome along with justifications are given in table-9 below.

Table 9: Rating-Assessment of Outcome-1

Particulars	Rating	Explanation/ Justification
Progress made towards outcome	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	Gaps in progress are found especially progress towards outcome indicators 2 and 3. The QC/ QA protocols are not properly developed and adopted, the main target of publishing the environment compendium with improved content though achieved however, the content of the compendium were not changed significantly. Moreover, proper consultation process regarding review paper on identification and removing of gaps in the existing protocols for data collection and compilation could not be followed properly.
Relevance	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	Outcome-1 was very well designed and was relevant to the project objective. The aim of the outcome (regarding strengthening the gathering of primary data, its compilation and flow) is well reflected in the designed outputs and activities. However, as described under the above sections, some gaps and deviation from the original design especially under outcome indicators 2 and 3 reduced the high relevance to a moderately satisfactory level.
Effectiveness	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	Regarding effectiveness the progress towards outcome-1 meets expectations, however there are some shortcomings in terms of risk of non-adoption of the frameworks due to absences of written MoUs, low coordination among the stakeholders especially the component leads and their partners due to lack of formal coordination bodies (as outlined in the project design), and some deviation from the recommended strategy and design of the project outputs (as discussed under the above section) that reduced the desired effectiveness of the outcome.
Efficiency	5 = Satisfactory (S): meets expectations and/or no or minor shortcomings	Cost effectiveness (satisfactory): Planned budget for outcome-1 was USD 80,500 while the revised budget (expended) was USD 88,056 with an increase of only USD 7,556 (9.4%). Efficiency in implementation approach: Effectively engaged the MoCC. Got the concept approved. However, original design and approach recommended in the ProDoc was changed to some extent.
Overall outcome-1	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	

4.3.3.3 Progress towards outcome-2

Outcome-2: A Coordinated and Robust Environmental Information Management System: The total GEF budget for this outcome as per original ProDoc was USD 265,000. No changes were made in the revised budget. This outcome aims to take forward the work of previous projects especially the NEMIS and its successor Pakistan Geomatic Project. It aims a functional and sustainable EMIS by making the system operational, actively managing it, effectively coordinating with member organizations contributing the

information, and cultivating their ownership and support. This outcome has six indicators; 1. A reliably functioning web (EMIS) portal hosting a multitude of data basis from participating organizations; 2. Sustained participation and continuous updating of the respective environmental databases by the respective participating organizations in National EMIS; 3. Pakistan's Annual State of Environment Report(s); 4. Consistency and complementarities in reporting environmental information by the Federal Government and the provinces; 5. Enhanced and improved country reporting against the three multilateral environmental agreements of CBD, UNFCCC and CCD, and; 6. Synergy between environmental research, reporting and practice. The outcome has six outputs and their activities. In the original project document this outcome had seven outputs however, during the inception phase output 2.4 and 2.5 were merged together and the activities are clubbed together under output 2.4 due to their similar nature.

Outcome indicator-1. A reliably functioning web (EMIS) portal hosting a multitude of data basis from participating organizations: There is one target under this indicator: National EMIS for Pakistan fully functional in year-1 and reliably operating during the course of the project and afterwards.

- **Progress achieved:** Two studies were conducted against this target; study on designing technical and institutional framework for the EMIS, and; study on designing IT framework for the EMIS. Operationalization and inauguration of EMIS was reported in progress.
- **Findings:** Progress mentioned was verified. Studies on technical and institutional frameworks for the EMIS and IT framework shared. IT consultant was also interviewed. Quality of the study reports is good. Though it's quite clear from the statement of the outcome-indicator-1 that the EMIS web portal would be functional in year-1 of the project, but it's the last year of the project and activities regarding this indicator are still in process. Planned activities on the development of the EMIS (such as upgradation of server and provision of desktop computer, development of EMIS software) were verified. Moreover, the project management was confident about completion of the planned work regarding operationalization of the EMIS. Activities conducted and planned are relevant, and moderately effective; efficiency (especially in terms of timeliness) is not so promising. The remaining tasks under this indicator are more likely to be completed.

Outcome indicator-2. Sustained participation and continuous updating of the respective environmental databases by the respective participating organizations in National EMIS: The target under this outcome indicator is: An effective management and coordination structure securing sustained participation and contributions of the existing EMIS partner organizations is established in year-1 and sustainably operated thereafter, making it more inclusive and broader over time.

- **Progress achieved:** Three studies conducted to identify key policy shifts or major developments that are required to integrate environment and development in Punjab, KPK and ICT. Focal persons from PBS, EPAs, P&Ds, FDs, academia nominated and engaged. Two professional networks established in FJWU and DES of UoP. Interns engaged. Twelve (12) research studies conducted through the DES of the UoP.
- **Findings:** Studies were verified. Reports shared with the TE consultant. Focal persons nomination was also verified. Meetings and interviews with focal persons/ their representatives were conducted. The focal persons and their assistants participated in the GGEB events and the PSC meetings. However, formal implementation and coordination committees at provincial level (one each at KP and Punjab P&D Departments) as described in the project document and the inception report are not established. FJWU and the DES of the UoP were engaged in holding workshops and seminars and conducting of

research studies. MoU with the DES of the UoP signed and copy shared with the TE consultant. However, MoU with FJWU could not be finalized. Twelve (12) research studies were conducted through the DES of the UoP. Research reports were shared with the TE consultant. List of interns shared with the TE consultant. Good gender ratio maintained in hiring of interns (4 female and 2 male interns). Inconsistency in nomination and appointment of the lead coordination body for the EMIS was found; Pak EPA (proposed in the original ProDoc)-Environment and Climate Change unit of MoCC (proposed in the inception report)-Pak EPA (at present)). Moreover, provincial implementation and coordination bodies were also not established. The TE consultant was informed that the IPs were responsible for establishment of the coordination structures, who could not do so due to the Covid-19 issue however, the IPs used their existing linkages and coordinated with relevant line departments through informal meetings. Lack of proper and formal structures and bodies reduced the effectiveness of coordination and ownership for the GGEB work. However, despite some of the abovementioned deficiencies the activities conducted under this indicator are, to some extent, relevant moderately contributing to the achievement of the desired outcome. Efficiency in terms of timeliness, implementation strategy, engagement of stakeholders, partnerships is moderately satisfactory with some gaps like not following the proper approach (as recommended in the ProDoc).

Outcome indicator-3. Pakistan's Annual State of Environment Report(s): This indicator has one target statement: Pakistan's First State of Environment Report published in year-1 and, one more annual report produced thereafter. The target of two annual SoE Reports has been changed to three SoE reports (one each at ICT, KPK and Punjab level).

- **Progress achieved:** Collaboration with Pak-EPA, Ministry of Climate Change established for revision and updating of the 2016 draft SoE report. The revision and publishing of SoE report is in progress. Developed liaison with relevant departments in provinces (P&D Board-Punjab, and EPA-KP) for development of the SOE reports. Developed and shared a template for environmental profile / State of Environment report for Punjab and KP.
- **Findings:** Verified. Report on “Guidelines for developing provincial SoE Report” shared. Quality of the report is good. Coordination with Pak EPA, KP EPA and the Punjab Planning and Development Board was verified during the interviews. However, final consensus on the updating and publishing of the KP environmental profile/ SoE report has not been reached with the new DG KP EPA. Coordination with KP EPA was affected due to transfer of the DG EPA and the new DG EPA is not very much on board. Moreover, plans for development of the Punjab SoE report are also not clear. The spadework regarding development of guidelines and the required data has been completed, what remains is just updating the existing federal SoE report and the provincial environmental profiles (especially of KP) as well as reaching consensus with the DG KP EPA. If properly followed up the federal and KP SoE reports could at least be finalized during the remaining period of the project. The target is likely to be achieved partially. Relevance of the implemented activity is satisfactory with minor gaps. Effectiveness of the implemented activities is moderately satisfactory with major gaps of issues in coordination with IPs. Efficiency is also moderately satisfactory with gaps of not following the planned approach and design as well as delays in implementation.

Outcome indicator-4. Consistency and complementarities in reporting environmental information by the Federal Government and the provinces: This indicator has the target: Bench marking of Environmental Statistics of Pakistan with the EMIS Identified Environmental Data Requirement.

- **Progress achieved:** Developed a template for environmental profile / State of Environment report for Punjab and KP.
- **Findings:** The progress was verified. Study report was shared and found good. However, the process of benchmarking as outlined in the project document was not properly followed. According to the project document the concept of bench marking was to make the provincial and national SoE reports comparable with each other. This was to ensure that the provincial SoE reports have all the requisite data and information that the national SoE report needs to reflect for the provinces. This was to be achieved as a result of iterative process through the project life. Though due to delays in preparation of the SoE reports the process could not be followed, however, the project team overcame this deficiency through including the standard outline and structure for the SoE reports, indicating the required steps to be followed and the required information to be reflected in the SoE reports. The study as reported under the achievement is quite helpful in filling the gap of benchmarking. However, the project team should properly guide the Pak EPA to takeover this responsibility of completing the process of benchmarking in future. The completed task under this indicator is expected to achieve the desired result.

Outcome indicator-5. Enhanced and improved country reporting against the three multilateral environmental agreements of CBD, UNFCCC and UNCCD: The target under this indicator is: A total of three Country Reports under CBD, UNFCCC and UNCCD due during the project are produced in time with enhanced content and quality.

- **Progress achieved:** Prepared 04 background papers related to UNCBD, UNFCCC, UNCCD and NDCs revision. The papers discussed the work carried out so far, reviewed the reporting done by Pakistan, identified gaps and frailties in the reporting and suggested way forward for their improvement. Support Ministry of Climate Change (MoCC) for Nationally Determined Contributions (NDCs) Revision.
- **Findings:** As reported in the project APRs and also in the self-assessment by the project team, the four background papers are drafted and are under review. Once finalized will be shared with the concerned focal points for the UNCBD, UNFCCC, UNCCD and NDCs. Moreover, it was reported that the project will provide technical support in the form of the review papers/ studies while the country reporting will remain the responsibility of concerned focal persons/departments. However, copies of the draft reports could not be provided to verify this activity. The review papers need to be quickly finalized and shared with the concerned focal persons. With minor gaps and delays the activity conducted and the progress reported is satisfactory regarding relevance, and effectiveness. Regarding relevance to the outcome; drafting of review papers are very much related to the concept mentioned in the project design, however, the draft papers need quick finalization and sharing with the concerned focal persons. Regarding effectiveness the level of progress is satisfactory with minor gaps as mentioned above. From efficiency point of view the progress made has some gaps regarding timely completion and sharing the recommendation with focal points as well as supporting the focal points in generating the lacking information for reporting on UNCBD, UNFCCC, UNCCD and Nationally Determined Contributions (NDCs).

Outcome indicator-6. Synergy between environmental research, reporting and practice: The target under this indicator is: Institute and pilot test need-based research collaboration between MoCC including directorate general of environment and Pak EPA, Provincial P&Ds together with EPAs, and two

universities, one each in Punjab and KP, involving a total of 12 short research assignments during the project period.

- **Progress achieved:** LOA was signed between the University of Peshawar (UOP) and MoCC through GEB project. Developed a comprehensive “research agenda” to be executed under the grant provided. Research studies conducted by the DES UoP. Engaged students interns in GEB project.
- **Findings:** Verified. Copy of LoA with the DES of the UoP shared with the TE consultant. Research agenda developed in consultation with the Pak EPA and DG Environment and Climate Change units of the MoCC. Copy of research topics shared. Research reports shared. Grant support confirmed by the Chairman DES UoP. Confirmed engagement of 06 student interns (4 female and 2 male interns). Research studies by a second university (FJUW) were not conducted. The target of 12 research studies was completed through the DES of the UoP. The progress is achieved. From efficiency point view the activity is satisfactory; quality of engagement with partners is good, oversight by both the project team and UNDP CO remained satisfactory, quality of reports and timelines are also satisfactory, issue of account opening was managed through direct payments from the project. Effectiveness of the progress also remained satisfactory; the progress achieved will likely contribute to the outcome, market-based mechanism was pilot tested and demonstrated (universities and researchers engaged in research and capacity building activities), willingness and cooperation by the universities and their active engagement proved to be the key factor of success however, their engagement in future needs to be ensured by facilitating formal agreements/ MoUs between universities and the GGEB IPs (Pak EPA, DG Environment MoCC, PBS, Provincial EPAs and Provincial P&Ds). The achieved progress (activities) is also satisfactorily relevant to the outcome and are mostly done as per project design and strategy with minor gaps.

4.3.3.4 Rating-Assessment of Outcome-2 (progress, relevance, effectiveness and overall outcome)

The overall rating of outcome-2 regarding progress made, its relevance, and effectiveness is **4 = Moderately Satisfactory (MS)**. Detailed assessment of the rating of the outcome along with justification is given in table-10 below.

Table 10: Rating-Assessment of Outcome-2

Particulars	Rating	Explanation/ Justification
Progress made towards outcome	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	<ul style="list-style-type: none"> • Progress under outcome indicator-1 is partially complete and is still in process; • Progress on outcome indicator-2 is complete with changes in coordination structures and no formal committees established. • Progress on outcome indicator-3 is partially complete. Only background work done (framework, data compiled). Preparation of SOE reports is still remaining) • Progress on outcome indicator-4 is satisfactory with some gaps of not following the process of benchmarking. • Progress on outcome indicator-5 is OK provided the review papers are properly shared and the recommendations incorporated. • Progress on the outcome indicator-6 is satisfactory with no major shortcomings.

Particulars	Rating	Explanation/ Justification
Relevance	5 = Satisfactory (S): meets expectations and/or no or minor shortcomings	<ul style="list-style-type: none"> Activities implemented and planned under outcome indicator-1 are relevant to the outcome with some changes and adjustments; Activities implemented and planned under outcome indicator-2 are relevant with major gap of not developing the formal implementation and coordination committees as proposed in the ProDoc, and inconsistency in nomination of lead coordinating body (Pak EPA-DG Environment MoCC-Pak EPA) Activities implemented under outcome indicator-3 are very much relevant to the outcome. However, some gaps regarding achieving to final output still exist. Activities implemented under the Outcome indicator-4 are very much relevant to the outcome. Activities implemented under the outcome indicator-5 are very much related to the concept mentioned in the ProDoc, however, the draft papers need quick finalization and sharing with the concerned focal persons. Activities implemented under outcome indicator-6 are relevant to the outcome and implemented as per project design and approach.
Effectiveness	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	<p>Effectiveness in terms of contribution to achievement of the outcome, engagement of stakeholders/ partners, dealing with risks involved) of the activities conducted under the outcome indicators;</p> <ul style="list-style-type: none"> Effectiveness of activities under outcome indicator-1 is moderately satisfactory with major gaps; Effectiveness of activities under outcome indicator-2 is moderately satisfactory with major gaps; Effectiveness of activities under outcome indicator-3 is moderately satisfactory with major gaps; Effectiveness of activities under outcome indicator-4 is satisfactory with minor gaps; Effectiveness of activities under outcome indicator-5 is satisfactory with minor gaps; Effectiveness of activities under outcome indicator-6 is satisfactory,
Efficiency	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	<p>Efficiency of activities implemented under outcome indicators (timeliness, strategy, partnerships)</p> <ul style="list-style-type: none"> Outcome indicator-1: Moderately satisfactory with gaps; Outcome indicator-2: Moderately satisfactory with gaps; Outcome indicator-3: Moderately satisfactory with some gaps. Outcome indicator-4: Moderately satisfactory with some gaps; Outcome indicator-5: Satisfactory with minor gaps Outcome indicator-6: Satisfactory
Overall outcome-2	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	

4.3.3.5 Progress towards outcome-3

Outcome 3: Enhanced commitment and capacity for sustainable development planning and legislation:

The total GEF budget for this outcome as per original ProDoc was USD 559,500 however according to the figures provided by the GGEB PMU the revised/ expended budget for this output was USD 551,944 with an increase of USD 7,556 (1.35%). Outcome-3 aims to improve integration of environmental consideration in developmental programs and projects of the government by building capacity, awareness and sensitization of government functionaries, civil service, politicians and decision makers. Outcome-3 has four indicators: 1. Understanding of environment issues among planners for economic development in public sector; 2. Access to environmental expertise and competence required for informed economic decision making; 3. Public opinion and support for environment protection and friendly development, and; 4. Political Commitment and Support for protecting environment and mainstreaming sustainability in economic development. This outcome consists of four outputs and their associated activities; Output 3.1: Exposure and Training of Civil Service; Output 3.2: Enhanced Access of Planning Functions to Environmental Expertise; Output 3.3: An Engaged Polity, and Output 3.4: Supportive Public Opinion through Media Support. In the original document these outputs were five however, output 3.4 and 3.5 were merged together during the inception phase.

Outcome indicator-1. Understanding of environment issues among planners for economic development in public sector: The indicator has one target: A core of 400 officers in economic development ministries and departments are exposed to the essentials of environment, through 90 workshops or seminars at respective ministries or departments and 12 guest-lectures in relevant training institutions. In the inception the target of 90 workshops/ seminar was reduced to 45.

- **Progress achieved:** Organized 12 lectures, 18 workshops/ seminars/ webinars/ trainings, and two RTCs.
- **Findings:** Verified. Reports shared. Beneficiaries also interviewed-overall satisfaction level ranges from moderate to high. As per ProDoc/ Addendum the RTCs were supposed to discuss the identification and removing of gaps in the existing protocols instead of sensitization. Implementation approach as proposed in the addendum was not followed; NIPA was not engaged in the lectures. A total of 18 workshops/ seminars/ trainings/ webinars could be conducted against the target of 45 workshops or seminars. However, the target of training 400 government officials was well achieved with reduced number of events. Major limiting factor of not organizing the required number of events was mainly the Covid-19 pandemic. The project management tried to fill this gap by organizing the virtual webinars but as reported by the project team the quality of the webinars was not up to the desired level. As proposed in ProDoc and the revised PRF the capacity building events were supposed to be organized through NIPA. This arrangement could not be implemented. The project management tried to take a government services training institute on board however due to some procedural issues they could not be taken on board. Copy of letter to DG Pakistan Planning and Management Institute (PPMI) regarding collaboration for integration of environmental lectures in the PPMI training modules was shared with the TE consultant. The capacity building activities and awareness events were then carried out inviting key resource persons from line departments and universities. Moreover, collaboration and partnerships were mainly established with universities. These partnerships resulted in cost effectiveness of the activity as the target was completed with a smaller number of events (18 against the planned 45). With minor deficiencies the implemented activities were very much relevant to the outcome, effective in terms of achieving the desired results with some gaps due to Covid-19

pandemic and quite efficient in terms of timelines, strategy, engagement of stakeholders and building partnerships.

Outcome indicator-2. Access to environmental expertise and competence required for informed

economic decision making: The target under this indicator is: Develop, design and pilot test an alternate market-based approach to capacity development for environment.

- **Progress achieved:** Universities were engaged for policy research. Government officials were engaged for capacity enhancement. Policy analysis studies were conducted. Developed a “research agenda” in coordination with Ministry of Climate Change, and implemented by the DES of UoP.
- **Findings:** The progress was verified. Policy analysis studies conducted through experts engaged from open market. Copy of LoA with the DES of the UoP were shared with the TE consultant. Research agenda developed in consultation with the Pak EPA and DG Environment and Climate Change unit of the MoCC. Copy of research topics were shared. Research reports were also shared. Research studies by a second university (FJUW) were not conducted. The target of 12 research studies was completed through the DES of the UoP. The DES of the UoP was also engaged in the capacity building activities. However, a formal linkage of the academia and other experts’ groups needed to be established with the IPs through formal MoUs for future continuity. In general, the progress is achieved. From efficiency point view the activity is satisfactory; quality of engagement with partners is good, oversight by both the project team and UNDP CO remained satisfactory, quality of reports and timelines are also satisfactory, issue of account opening was managed through direct payments from the project. Effectiveness of the progress also remained satisfactory; the progress achieved will likely contribute to the outcome, market-based mechanism was pilot tested and demonstrated (universities and researchers engaged in research and capacity building activities), willingness and cooperation by the universities and their active engagement proved to be the key factor of success however, their engagement in future needs to be ensured by facilitating formal agreements/ MoUs between universities and the GGEB IPs (Pak EPA, DG Environment MoCC, PBS, Provincial EPAs and Provincial P&Ds). The achieved progress (activities) is also satisfactorily relevant to the outcome and are mostly done as per project design and strategy with minor gaps.

Outcome indicator-3. Public opinion and support for environment protection and friendly

development: There are two targets under this indicator: a). Two popular TV drama serials to Increase the environmental understanding and support of masses, reachable by popular TV, and thus stimulate popular demand for environment protection and sustainable development; b). Likewise target opinion leaders in media (press and electronic) through 12 site visits to high profile projects.

- **Progress achieved:** Organized two visits of Media representatives/selected stakeholders. Developed knowledge products related to EMIS and environment (Drafted brochure, newspaper articles, factsheets and reports as knowledge products). Two documentaries/dramas were prepared and are under approval process. Public opinion survey is planned in 2022.
- **Findings:** Also explained under the objective indicator 4.1. The target is partially achieved. Two animated videos, factsheets and compiled project reports were shared. Moreover, the developed material is still under the process of review. Dissemination of these products is also planned to be done through the GGEB project website. GGEB website was checked and only project reports are displayed and are available on demand. According to the inception report TV dramas as proposed in the original project document were suggested to be replaced by a more promising, yet flexible

intervention (documentaries), under a cohesive communication strategy with relevant partnership arrangements. The project, however established linkages with the media representatives including TV channels and newspapers through their engagement in awareness events and visits. Good media coverage of GGEB projects events and their messages is reflected in the events reports. Quality of the animated videos need to be improved as well as proper dissemination strategy is needed to ensure that the awareness materials are shared with the target audience. Moreover, feedback on the awareness materials is planned. Keeping in view the limited time left its unlikely that any feedback would be collected on the awareness material. However, feedback plan and methodology should be developed by the GGEB and the Pak EPA properly briefed to implement it once it assumes the full charge of the EMIS. Relevance of the activities implemented under this indicator with the achievement of the desired outcome is moderately satisfactory. Effectiveness (in terms of contribution to achievement of the outcome, engagement of stakeholders/ partners, dealing with risks involved) is also moderately satisfactory due to some gaps especially in terms of contribution to the outcome (gaps in quality of documentaries, lack of dissemination). Efficiency is again moderately satisfactory due to some gaps in especially due delays in completing the whole process.

Outcome indicator-4. Political Commitment and Support for protecting environment and mainstreaming sustainability in economic development: This indicator has four targets: a) Expose the existing standing committees on environment in different houses of public representatives, create new ones where needed though a total of 24 briefing sessions.; b). Engage a broader spectrum of politicians both at federal and provincial level by organizing site visits to high profile development projects for discussions on their economic and environmental promises and implication. About 9 such visits are envisaged; c). Increase the number of development projects whose design is positively shaped by environmental considerations, and; d). Engaging the current leadership to contribute to the project objectives, specifically related to environment information management.

- **Progress achieved:** Two press briefings, and one onsite visit organized at CPEC site.
- **Findings:** Verified. Reports were shared with the TE consultant. Only 02 onsite briefing and one site visit to CPEC could be organized against the total target of 24 briefings and 9 site visits. This was mainly due to the Covid-19 pandemic. Information on the increased number of development project with enhanced environmental considerations, could not be provided. The gap due to Covid-19 pandemic was partially met by adopting to the virtual means by engaging some officials and decision maker through the webinars. The activities implemented under the indicator are relevant with some gaps of not meeting the target due to Covid-19. Due to limited achievement regarding engaging political fraternity and their sensitization about integration of environment in development the effectiveness is moderately unsatisfactory. Efficiency of the activities under this indicator also remained moderately unsatisfactory due to lack of effective engagement of opinion leaders.

4.3.3.6 Rating-Assessment of Outcome-3 (progress, relevance, effectiveness and overall outcome)

The overall rating of outcome-3 regarding progress made, its relevance, and effectiveness is 5 = Satisfactory (S). Detailed assessment of the rating of the outcome along with justification is given in table-9 below.

Table 11: Rating outcome-3 assessment

Particulars	Rating	Explanation/ Justification
Progress made towards	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	<ul style="list-style-type: none"> Progress under outcome indicator-1 is complete achieving the desired result of training 400 officials; Progress on outcome indicator-2 is almost complete with a smaller number of events (18 against a target of 45) Progress on outcome indicator-3 is partially complete. Dissemination of awareness material including documentaries and getting feedback from target audience are still remaining. There are some quality issues with the documentaries. Progress on outcome indicator-4 is low. Only 2 briefings and one visit could be organized out of 24 briefings and 9 visits for opinion leaders and political fraternity.
Relevance	5 = Satisfactory (S): meets expectations and/or no or minor shortcomings	<ul style="list-style-type: none"> Activities implemented under outcome indicator-1 are very much relevant to the outcome; Activities implemented and planned under outcome indicator-2 are relevant to the outcome. Activities implemented under outcome indicator-3 are relevant to the outcome. Activities implemented under the Outcome indicator-4 are very much relevant to the outcome.
Effectiveness	5 = Satisfactory (S): meets expectations and/or no or minor shortcomings	<p>Effectiveness (in terms of contribution to achievement of the outcome, engagement of stakeholders/ partners, dealing with risks involved) of the activities conducted under the outcome indicators;</p> <ul style="list-style-type: none"> Effectiveness of activities under outcome indicator-1 is moderately satisfactory with minor gaps due to Covid-19 issue; Effectiveness of activities under outcome indicator-2 is satisfactory; Effectiveness of activities under outcome indicator-3 is satisfactory with some gaps; Effectiveness of activities under outcome indicator-4 is moderately unsatisfactory with major gaps;
Efficiency	4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings	<p>Efficiency of activities implemented (timeliness, strategy, partnerships)</p> <ul style="list-style-type: none"> Outcome indicator-1: Satisfactory; Outcome indicator-2: Satisfactory; Outcome indicator-3: Moderately satisfactory with some gaps. Outcome indicator-4: Moderately unsatisfactory with major gaps;
Overall outcome-3	5 = Satisfactory (S): meets expectations and/or no or minor shortcomings	

4.3.3.7 Overall outcome rating

Keeping in view the evaluation rating of outcome-1, 2 and 3 the overall rating of the outcomes is **4 = Moderately Satisfactory (MS)**;

4.3.4 Country ownership

4.3.4.1 Linkages of GGEB project with the international and national priorities

Pakistan being signatory to several multilateral environmental agreements such as the three major Rio conventions UNCBD, UNFCCC and UNCCD, Ramsar Convention (1978), the Bonn Convention on Migratory Species (1987) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora or CITES (1976) signifies its interest and commitment to address the key challenges of environment at home and to contribute to the stability and sustainability of global environment. This resulted in several initiatives like development and implementation of National Conservation Strategy 1992, Pakistan Environment Action Plan 2001, National Biodiversity Strategy and Action Plan (2000 and 2017), Pakistan Forest Policy (2001), Pakistan Environment Policy (2005), National Sustainable Development Strategy (2012), National Forest Policy 2015 and Climate Change policy 2012. Integration of environment and development is one of the main priorities in these documents. The GGEB projects outcomes and activities are also clearly linked with the government's past initiatives like the NEMIS and Pakistan Geomatic Project. The project was identified as a priority of the GOP and has been endorsed by the GEF Operational Focal Point in a letter to the GEF.

4.3.4.2 Participation and engagement of stakeholders in project formulation

The project concept and proposal were developed as a result of elaborate consultation process engaging all relevant stakeholders (federal government ministries and organizations, provincial government line departments and organizations, development functionaries, politicians, national and provincial training institutions, academia, media representatives, and environmental NGOs and thinktanks). They were engaged through individual and group meetings, workshops, phone calls and site visits with government agencies and civil society organizations. Availability of proper and reliable environmental data and information has always been considered as one of the pressing needs for integrating environment and development.

4.3.4.3 Ownership in MoCC

Ownership for the GGEB project work in MoCC is moderate. NPDs nominated and the PSC established and their meetings held. Regarding overall lead of the EMIS the Pak EPA readiness to take the work of EMIS and its coordination was also found moderate due to its limited capacity. However, the MoCC has approved the PLAN Project funded under the 10BTAP Project, expected to strengthen the Pak EPA's capacity regarding continuity of the GGEB work.

Ownership among the Directorate General of Environment and Climate Change and the focal persons for MEAs was found low that may hamper the adoption of the recommendations under the review papers developed for the improved reporting under the international conventions. The review papers and recommendations need to be shared and their input need to be incorporated in the papers. Linkages with some ongoing projects (10BTAP) may improve the ownership for the GGEB work and its continuity.

Regarding co-financing the federal government has partially fulfilled its commitment in the form of in-kind support such as time cost, office space cost, travel and provision of venues for meetings. The actual in-kind support remained 105% of the total commitment. However, the parallel co-financing commitment could not be fulfilled.

4.3.4.4 *Ownership among the IPs*

Ownership among the IPs (PBS, Provincial EPAs and Provincial P&Ds) is again moderate. Focal points were nominated and were engaged in the project events and the project steering committee meetings. However formal agreements and MoUs could not be signed to ensure adoption of the recommended frameworks and smoothly sharing of data and information from the line departments. The project document proposed a devolved implementation giving the independence to the component leads to implement their relevant activities. The PMU had the role of overall coordination, facilitation, technical backstopping and monitoring. However, due to some administrative and procedural issues like problems in opening of several accounts, and expected delays in delivery the implementation was mainly done by the PMU in consultation with the component leads. During the meetings/ interviews the project team and the NPD informed that the MoCC (NPD) would write letters to the IPs for adoption of the GGEB frameworks and recommendations. If properly done this may improve the ownership among the component leads (focal persons of the IPs).

Like federal government the provincial governments of KP and Punjab fulfilled their in-kind co-financing commitment to the project. However, they did not fulfill their parallel co-financing commitment to the project.

4.3.4.5 *Ownership among academia*

Academia was effectively engaged and their ownership was found high especially, providing expertise and research support under the market-based mechanism. The DES of the UoP was quite enthusiast about the project work. The department was ready to share their students' thesis reports and research publications on the EMIS portal.

4.3.5 Gender

4.3.5.1 *Recommended measures in the project document for gender mainstreaming*

Despite of the gender-neutral interventions, the GGEB project design is gender responsive and recommended suitable measures to mainstream gender in sustainable development. As already elaborated under section "4.1.6 Gender responsiveness of project design" these measures include; a) Involve in the EMIS organization that hold and produce information on gender issues; b) Design data collection tools that report gender segregated information as much as possible; c) Ensure eligible women participants are actively enlisted for participation in various training and awareness raising workshops; d) Engage women experts, where possible, for delivering the required training and educational lectures and workshops; e) National and Provincial State of Environment reports carry relevant gender data; f) Ensure research and policy components include addressing some key gender issues under the three Rio conventions; g) Engage eligible women researchers and policy professional for undertaking policy research studies under the project; h) Include female students in the internship and fellowship activities in the target partner universities i) Make the Country Reports under Rio Conventions more inclusive of the relevant gender issues; j) Involve women parliamentarians in the activities under the component of engaged polity; k) Target the media support component such that it targets women issues and leverage participation and support of women journalists and media professionals for the purpose. During the project formulation women were also involved in the consultation process.

4.3.5.2 *Gender engagement in the project activities*

The project management tried to ensure good representation of females in its activities. The Project Steering Committee (PSC) had female representation. Ms. Naheed Durrani Secretary MoCC remained as

chair of the PSC, Ms. Farzana Altaf DG Pak EPA and Ms. Zainab Khatoon Chief Foreign Aid KP P&D participated as members of the PSC. Out of the four PMU staff one was female (25%). Moreover, out of the six interns engaged under the GGEB project four were females (67%). Out of the total 1300 participants/ beneficiaries of the GGEB events 557 were females (41%). Women policy and decision makers were also engaged in the policy briefings and visits to development projects. Regarding contribution to gender equality and women's empowerment the proposed project data collection templates and EMIS covers gender disaggregated data and information related to environment, environmental management and associated socio-economic aspects. If the recommended tools and templates are properly adopted, these will contribute to the gender equality and women's empowerment by providing access to reliable and updated data and information in terms of environmental statistics, issues, impacts and response.

4.3.6 Cross-cutting Issues

GGEB project addresses all of the five objectives of the GEF -5 program framework for Cross-Cutting Capacity Development; a. To enhance the capacities of stakeholders to engage throughout the consultative process; b. To generate, access and use information and knowledge; C. To strengthen capacities to develop policy and legislative frameworks; d. To strengthen capacities to implement and manage global convention guidelines, and; e. To enhance capacities to monitor and evaluate. Of these five objectives the project particularly addresses the second 'to generate, access and use information and Knowledge' and the third, 'to strengthen capacities to develop policy and legislative frameworks'. This is also in conformity with the UNDP strategic priority of 'Strengthened national capacities to mainstream environment and energy concerns into national development plans and implementation systems' and with its country program outcome: 'Commitments under global conventions on biodiversity implemented'.

The GGEB project was designed to contribute to the UNDP CPD outcome as outlined in the ProDoc "A comprehensive approach integrating environmentally sustainable development, global environmental concerns and commitments in national development planning, with emphasis on poverty reduction and with quality gender analysis". The project also contributes to the UNDP CPD 2018-22 Outcome-2 (Enhanced resilience and socioeconomic development of communities) and its priority areas of building institutional capacities, climate change mitigation and adaptation, and disaster prevention and recovery.

The project is also mainstreaming UNDP's priority of knowledge management by development of an improved and sustainable EMIS that will ensure availability of reliable environmental data and information to policy makers, development functionaries and researchers for improved decision making.

The GGEB project also contributes to the national priority regarding capacity building as identified in the National Capacity Self -Assessment (NCSA 2008). It also contributes to the crosscutting areas of Gender, Poverty and Environmental Integration as mentioned in the National Biodiversity Strategy Action Plan 2017 by ensuring data and information for development, planning and implementation of projects.

The GGEB projects capacity building activities by engaging 1300 participants has already contributed to sensitise and train environment and development professionals regarding effective use of environment data and information and integrating of environmental considerations in development including projects and programmes development and implementation in the aforementioned priority areas. As the EMIS and publication of the SOE reports are still in process, their contribution cannot be assessed at this stage,

however it is foreseen that these initiatives by enhanced availability of environmental data and information will contribute to effective planning and implementation of projects in the abovementioned priority areas. Moreover, improved environmental projects will add to reduced environmental hazards, and improved adaption and mitigation measures including improved early warnings. MoCC's and UNDP's GLOF-II project is also working on development of data repository and web-portals which will also include environmental data and information. The project by developing an EMIS will support these initiatives.

4.3.7 Social and Environmental Standards

A proper Social and Environmental Safeguards Plan was developed. The SES Plan was implemented and monitored during the project implementation. The SES Plan had identified the following risks and proposed mitigation measures. Key risks, their mitigation measures and status are presented in table-12 below.

Table 12: Key risks, their mitigation measures and status

Risk	Impact and probability (I-5)	Significance (low, moderate, high)	Mitigation measures/ actions	Status of implementation
Stakeholders such as CSOs representing marginalized voices may be excluded or inadequately represented.	I=1 P=4	Moderate	<ul style="list-style-type: none"> CSOs engaged in project formulation workshops and their input incorporated; CSO represented in PSC; CSOs represented in workshops; CSOs engaged in public opinion mobilization 	Adequately implemented
Not all functionaries for project implementation may have the knowledge of human rights aspects of the Rio conventions.	I=1 P=4	Moderate	<ul style="list-style-type: none"> Exposure of project functionaries to human rights aspects of Rio conventions and the how to address them in a best way. Develop checklist for the human rights aspects of Rio conventions. 	Implemented (disseminated knowledge of human rights aspects of the Rio Convention in capacity building activities.)
Women and girls may be excluded and gender issues not or inadequately addressed	I=3 P=5	High	<ul style="list-style-type: none"> One of the two project development consultant was a female; Women were invited to project consultation workshops; Women will be invited to the project inception workshop; Efforts to offer equal opportunity to women in hiring project staff; Provide equal opportunities to invite women to project workshops and events; Women involvement in efforts regarding 	Adequately implemented

Risk	Impact and probability (I-5)	Significance (low, moderate, high)	Mitigation measures/ actions	Status of implementation
			component of mobilizing public opinion.	
Travel for project implementation including travel for hosting meetings will all likely have carbon footprint that may not be addressed.	I=1 P=5	Low	<ul style="list-style-type: none"> Project design recommend to use virtual means for some meetings/ webinars (using skype, go to meeting etc.) Take additional measure to ensure that meetings are organized in an environment friendly way; Develop project specific guidance and checklist from the onset; 	<ul style="list-style-type: none"> Webinars and online meetings conducted; Most of the travel was by road. Air travel was low; Only necessary travel was done using carpool/public transport.

4.3.8 Sustainability: financial, socio-economic, institutional framework and governance, environmental, and overall likelihood

4.3.8.1 Financial sustainability

The original project design has based the financial sustainability of the project on the following assumptions;

- Using the existing structures and human resources would help avoid too much financial burden on the implementing partners, and would not require too much financial resources to continue the EMIS in future;
- The Pak EPA, being the lead coordinating body for the EMIS would have resources available from the 03 years project of Pakistan Geomatic Center having budget allocation of Rs. 48.885.million (USD 489,000). However, due to delays the geomatic project also ended and it too faced issues of sustainability.

The first situation and assumption are still valid. Due to some changes in implementation strategy the existing staff of the implementing partners (especially the PBS, KP P&D Department and the Punjab Planning and Development Board) were engaged as focal persons and their assistants. These changes, though affected the level of coordination and pace of implementation, however reduced the extra burden of resource requirements. If input from these positions is continued during the post project period, requirement for more financial resources would be in an acceptable range.

The second assumption/ situation is not valid at the moment. Due to too much delays in the project initiation (almost two years and nine months), the situation on the ground changed to a great extent. The project for the Geomatic Center was completed and as reported in the inception report it faces the issue of sustainability. At the time of the TE the Pak EPA was facing issue of limited financial resources. The equipment especially the web portal/ server was outdated and needed upgradation and improvement. It also faced issues of salaries for its IT expert. Though at the moment GGEB project was providing support for upgradation of the web server, installation of EMIS software, provision of GIS software and salary support for the IT expert, however financial support was needed to continue these in future. Both the DG

EPA and the GGEB NPD informed that a PLAN project was approved by the MoCC under the 10BTAP project to support the Pak EPA, which would have sufficient financial resources to sustain the EMIS and other related work of the GGEB project.

At provincial level, it was informed during the interviews that the Punjab Planning and Development Board had recently approved the Punjab Green Development Programme (PGDP) with the World Bank financial support. The programme has components regarding institutional restructuring and strengthening of the Punjab EPD/ EPA, and regular publication of the SoE reports for Punjab. The GGEB framework would be adopted for this purpose. Moreover, the PGDP would have sufficient financial resources to sustain the GGEB work in Punjab. In KP, no such initiative was reported, however the KP P&D has its Bureau of Statistics, which has its regular resources to carry forward the work of GGEB project. However, moderate risks to financial sustainability exist, as there is likelihood that the GGEB project work may not be the priority of these projects.

Rating: 3 = Moderately Likely (ML)

4.3.8.2 Socio-economic sustainability

GGEB project supports the mainstreaming of environment in development projects. Mainstreaming environment in development is a step itself to sustaining the development ensuring the socio-economic sustainability. Ownership for the GGEB project among the stakeholders (MoCC, Pak EPA, PBS, Provincial P&Ds and Provincial EPAs) was found moderate. However, the need of environmental data and information is on high priority and the present government has environment on its priority list. So, the political will is there and provides conducive environment for the GGEB work to continue. Moreover, the project implemented a full-fledged component regarding awareness of stakeholders especially integration of the environment in development. This has also raised awareness among the key stakeholders. Therefore, there is no significant risks to the socio-economic sustainability of the project.

Rating: 4 = Likely (L)

4.3.8.3 Sustainability of institutional framework and governance

Regarding institutional and governance framework, the original project document proposed establishment of seven committees; three at federal level (a Project Executive Committee, and two Component Implementation Committees one each in Pak EPA and PBS) and four at the provincial level (four Component Implementation Committees one each at provincial P&Ds and Provincial EPAs). These were then reduced to three (a Project Executive Committee at the federal level, and two Component Implementation Committees one each at the provincial P&D Departments). The original project document also proposed that except the PSC the implementation committees would be continued during the post project period for sustaining the coordination and data sharing mechanism. Though reducing the number of committees was a good decision regarding sustainability, however there should have been at least one implementation and coordination committee at Pak EPA. However, it was found that none of the proposed implementation and coordination committees could be established during the project implementation. The component leads held their coordination meetings on need basis.

Another key point strongly proposed in the project document as well as in the inception report was signing of agreements/ MoUs among the MoCC, the component IPs and the line departments for effective coordination, adoption of the GGEB frameworks and smooth sharing of data and information including regular publication of the SOE reports and compendiums. As informed by the project management MoUs

were replaced by simple letters regarding sharing and adoption of the GGEB frameworks, data sharing and coordination.

The GGEB Project Document also recommended limited number of temporary positions of the component coordinators and their IT experts to be placed in the component IPs (PBS, KP P&D Department and Punjab P&D Board) preferably to be financed by the government co-financing commitment. If needed these would be absorbed in the system for any residual work to be done during the post project period. The project avoided creating too many new positions and placed the responsibility mainly on the existing positions/ staff within the IPs. Later on, the project management unit changed its strategy and engaged the existing officials as focal persons and their assistants to implement the GGEB project activities. During the discussions with the IPs it was found that the designated focal persons and their assistants were too much over-burdened with their existing work having limited time for the GGEB activities. However, as mentioned above, the initiation of new projects (PLAN project by the Pak EPA and Punjab Green Development Programme by the Punjab P&D Board and Environment Protection Department (EPD)) provide good opportunity of institutional and technical support enhancing chances of sustainability.

Moreover, regarding institutional sustainability the GGEB project had interventions to adopt the market-based approach creating and enabling market for generating, sourcing and supplying information for, and through, EMIS. The project also followed a market-based approach regarding environmental research and analysis as well as mobilizing public opinion in support of integrating environment and development. These activities were implemented by the PMU and market-based piloted in collaboration the FJWU and DES of the UoP. The approach is being already adopted. WWF-Pakistan was engaged in third party monitoring of the KP BTTAP project and WWF-Pakistan and IUCN Pakistan were engaged in the third-party monitoring of the 10BTTP project. Similarly, under the Green Pakistan Programme WWF-Pakistan and other independent consultants and firms were engaged in conducting studies and development of management plans for protected areas. Therefore, chances of adoption of the market-based approach for various expertise and research are high, which will reduce the risks to technical and institutional sustainability.

Rating: 2 = Moderately Unlikely (MU)

4.3.8.4 Environmental sustainability

Environmental sustainability of the GGEB project is quite high. The project supports development of EMIS and ensures regular availability of environmental data and information. It also supports integration of environment in development. There no such activities of the GGEB project that would enhance environmental risks from the project. The SES Plan has identified only one risk “Travel for project implementation including travel for hosting meetings will all likely have carbon footprint that may not be addressed” having low significance. This does not pose any environmental risks to project outcome and outputs.

Rating: 4 = Likely (L)

4.3.8.5 Overall likelihood

Keeping in view the above-mentioned situation and risks to the sustainability the overall likelihood of the GGEB projects’ sustainability is rated as **2 = Moderately Unlikely (MU)**

4.3.9 GEF Additionality

Additionality in outcome-3 is high as compared with other outcomes. Outcome-3 is about capacity building and sensitization and awareness of stakeholders. The project extended its capacity building, sensitization and awareness activities from KP and Punjab to Sindh and Balochistan. The project also engaged more beneficiaries than the intended target groups. It trained and sensitized a wide range of beneficiaries; government officials from different line departments; representatives of Civil Society Organisations (CSOs) and; representatives of media and students and researchers from academia. Under outcome-1 the project developed beta version of an innovative Project Dashboard for the MoCC. Strong willingness exists for the operationalization of the beta version of the Projects Dashboard. The Project Dashboard if operationalized would add to proper monitoring and quality control of the implementation of various projects of the MoCC. In addition to these the project also added to refinement of GoP procedure for implementation of NIM projects in Pakistan. The project and UNDP CO teams effectively coordinated and brought clarities in the implementation of NIM projects and got the endorsement and approval of the MoCC and the EAD. This paved the way for smooth implementation of other NIM projects.

4.3.10 Catalytic Role / Replication Effect

The GGEB project document indicated the following potential areas of replication;

- Further expansion of the basic EMIS developed under the GGEB project. Inviting more organizations to contribute their data and information as a part of the EMIS, and potentially setting up similar systems at the provincial level.
- Further replication and scaling up of the EMIS system to other federating units and organizations both at provincial and federal level.
- Further replication and scaling up of the market-based approach developed and pilot tested by the GGEB project.
- Replication of lessons and experiences gained by the project from its innovative approaches, the EMIS and mainstreaming environment in development at global level (in countries with similar environmental and socio-economic conditions like Pakistan)

After evaluating the status, the project has been successful in replicating its training, awareness raising and sensitization activities throughout Pakistan with more partners. The project has been successful in sensitizing the target groups about the need of a robust EMIS and availability of environmental data and information as well as the mainstreaming of environmental consideration in development. It was the GGEB and its predecessor projects which introduced the concept of an EMIS. Due to delays in the GGEB activities especially the EMIS, replication and scaling up could not be done during the project period however, potential is still there.

4.3.11 Progress to Impact

The overall goal of the GGEB project is 'Generating Global Environmental Benefits from Improved Decision Making in Pakistan. Its specific objective is 'to remove the barriers to environmental information management and mainstreaming global environment concerns into economic decision making'. The PRF/ logical framework has five objective level indicators; 1. An Environmental Information Management System for Pakistan developed under the NEMIS project is functioning effectively and sustainably; 2. Enhanced capacities for integrating environment in economic development by the Government of Pakistan as well as the provinces of Punjab and KP; 3. A Market mechanism for sourcing and supplying environmental information; 4. Public Opinion is better informed and more supportive of environmental

protection and sustainability, and; 5. Enhanced and sustained political support to mainstream sustainability in economic development. The TE assessed the impacts considering these five objective indicators. The project has three interrelated outcomes: 1) Regular availability of consistent and reliable environmental data; 2) A coordinated and robust environmental information management system, and; 3) Enhanced commitment and capacity for sustainable development planning and legislation.

Keeping in view the project goal, objectives and outcomes the GGEB project has three types of foreseen impacts; 1). Impacts regarding availability of consistent and reliable environmental data and information; 2). Impacts regarding enhanced awareness and capacities for mainstreaming environmental considerations in development, and; 3). Impacts regarding mainstreaming environmental considerations in development.

1). Impacts regarding availability of consistent and reliable environmental data and information: Due to delays in implementation the medium and high-level impacts cannot be seen at this stage, however a low-level impact could be assessed at this stage. During the interviews with the IPs and line departments they acknowledged the need for an improved and robust EMIS and showed willingness and readiness to improve data collection, compilation and sharing under the EMIS.

2). Impacts regarding enhanced awareness and capacities for mainstreaming environmental considerations in development: A total of 1300 participants participated including 400 government officials in the GGEB events. A total of 26 beneficiaries/ participant of the GGEB project events were randomly selected and interviewed by the TE consultant. Eighty percent of the beneficiaries surveyed had high impression of the quality and usefulness of the GGEB events; 75% supported environmental integration in development projects and 38% also shared the recommendations of the workshops with their respective organizations.

3). Impacts regarding mainstreaming environmental considerations in development: The high-level impacts are not possible as the project activities were implemented with delays. However, from the review of publications of the Ministry of Planning, Development & Research (MoPD&R) some changes in the planning guidelines and tools were found. The MoPD&R/ Federal Planning Division has developed “Manual for Development of Projects, 2021”. The manual recommends environmental sustainability to be considered both at the design and implementation stages. It also recommends monitoring of the environmental impacts and their mitigation plans. Representatives from the federal planning division and the provincial P&D departments participated in the GGEB project events (workshops, seminars and RTCs). The EPAs are already onboard in the GGEB projects.

5. Main Findings, Conclusions, Recommendations & Lessons

5.1 Main Findings

5.1.1 Project Formulation

Based on documents review and interviews of the project team, and stakeholders the GGEB Project was found highly relevant in terms of the needs identified during the consultation process and also reflected in Pakistan’s national policies and strategies such as the National Environment Action Plan (NEAP), Biodiversity Action Plan (BAP 2000), National Climate Change Policy 2012, National Forest Policy 2015, and Pakistan National Biodiversity Strategy Action Plan 2017. The project addresses the needs of updated and reliable environmental data and information and mainstreaming of environmental considerations in

development programmes. The project is in full conformity with UNDP's Country Program Outcome: 'Commitments under global conventions on biodiversity implemented' and GEF-5 programme framework for Cross-Cutting Capacity Development.

From design point of view the project is well constructed giving detailed account of the background context, the previous projects and their work, issues related to their work, and the need for improvement and sustainability. Project Results Framework/ Logical Framework has properly defined goal, objective, outcomes (03) and outputs (17). However, detailed activities are not given in the PRF. Moreover, the project design is too much dependent on the previous projects' work such as the NEMIS and Geomatic project, which also faced sustainability issues. Targets under outcome-3 (training of 400 government officials through 90 workshops and seminars, and 12 guest lectures) seems to be a bit overambitious. Changes and adjustments made in the project design during the inception phase had some shortcomings as well. These include; lack of clarity on hiring of component coordinators; lack of revised overall workplan and budget plan.

5.1.2 Project implementation

The project document provides well-structured implementation and management arrangements, which were adjusted and refined during the inception phase. Regarding actual implementation the project steering committee was established and its regular meetings held. The PMU consisting of the NPD, NPC, and APO later on strengthened by hiring of Individual Consultants as Admin and Finance Officer and Project Assistant, was established. Focal persons from PBS, Provincial P&D Departments and Provincial EPAs were also nominated. However, some changes made in the implementation strategy were also found. These included; Component Coordinators were not hired. These were rather compensated by engaging the assistants to the focal points of the component leads; Funds were not transferred to the component leads due to issues of opening several bank accounts. All expenses were done by the PMU; Formal component coordination committees were not established. The component leads held informal meetings with line departments.

Stakeholders' participation was confined to main IPs, line departments and academia. Participation of some key stakeholders such as provincial line departments like wildlife, agriculture, industry, transport, and energy departments, and NGOs like WWF and IUCN remained very low. Their participation was limited to training and awareness events. Participation of stakeholders in training, consultation and awareness events has been good and encouraging. MoUs with key stakeholders as elaborated in the project document and also in the inception report were not finalized both at federal and provincial levels. The project management substituted the MoUs with the nomination of focal persons from the IPs. Good efforts were made to build partnerships especially with academia.

The project management faced some issues during the implementation; minimum staff at the PMU, lack of clarity regarding GoP procedures for the implementation of NIM projects in Pakistan, the Covid-19 pandemic, frequent changes of NPDs, high turnover of the focal points and delays in transfer of advances due to audit observations (mostly related to other projects of MoCC during 2021). Response of the project team to these issues was found satisfactory. The response measures included; regularly coordination and liaison with MoCC; holding virtual meetings and webinars, and; nomination of alternate focal points (assistants to the main focal points).

5.1.3 Project finance and co-finance

GEF financing: Out of the total committed funds of USD 995,500 the expenditure till December 2021 was USD 844,829 (84.86%). The remaining balance of USD 150,671 is planned till Mar 2022;

UNDP co-financing (parallel): Out of the total committed parallel co-finance of USD 217,700 the expenditure till December 2021 was USD 185,386 (78.41%). The remaining balance of USD 32,314 is planned till Mar 2022;

Government of Pakistan co-financing: No parallel co-financing could be provided out of the total committed USD 636,350. However, in-kind co-financing in terms of time cost, office cost and resources used for the GGEB project has been encouraging. A total of USD 89,926 out of the planned USD 86,000 (104%) has been provided in this regard.

Financial delivery: Financial delivery of the project has been encouraging throughout the project life. As of Dec 2021, the overall financial delivery remained 84%; 100% in 2017-18; 92% in 2019, 65% in 2020 and 93% in 2021. The low financial delivery in 2020 was mainly due to the Covid-19 pandemic.

5.1.4 Progress towards objectives

Objective indicator-1. (An Environmental Information Management System for Pakistan developed under the EMIS project is functioning effectively and sustainably): Most of the background and preparatory work regarding EMIS (such as frameworks, identification of indicators, variables for data collection and compilation of the existing data) is complete. However, upgradation of hardware and development and installation of software is in progress and is likely to be completed. Moreover, progress on the SOE reports is in progress and only guidelines could be developed and shared so far. Only federal level SOE report is likely to be updated and published provided the PMU follow it up actively. Objective indicator-2 (Enhanced capacities for integrating environment in economic development by the Government of Pakistan as well as the provinces of Punjab and KP): Progress on targets regarding this indicator is mostly achieved however, formal endorsement of PBS and other IPs is needed to ensure their adoption of the identified indicators and variables for data collection, and the environmental screening of development projects. Objective indicator-3. (A Market mechanism for sourcing and supplying environmental information): The target of developing and pilot testing a market-based approach to sustainability in capacity building for environment” has been mostly achieved. The DES of the UoP was engaged in research and trainings. The strategy of engaging NIPA or other government services academies in delivering the GGEB trainings was slightly changed due to administrative issues. Good partnerships were established with universities. Objective indicator 4. (Public Opinion is better informed and more supportive of environmental protection and sustainability): The target is partially achieved. Two animated videos, factsheets and compiled project reports were shared. Moreover, the developed material is still under review. Dissemination of most of these products is also planned to be done through the GGEB project website. Compiled project reports are available on GGEB website. Coverage of GGEB events in press media is done. Feedback from target audience has not been done yet. Quality of the animated videos need to be improved. Objective indicator-5: The progress is partially achieved. Only 02 onsite briefings could be organized against the total target of 24. This was mainly due to the Covid-19 pandemic. However, topics about mainstreaming sustainability in economic development were also covered through other events. **Rating: 4 = Moderately Satisfactory (MS)**

5.1.5 Progress towards expected outcomes

Outcome-1: Regular availability of consistent and reliable environmental data: As per original ProDoc the total planned budget for outcome-1 was USD 80,500.00 while the revised budget was USD 88,056 with an increase of USD 7,556 (9.4%).

- Outcome indicator-1. Availability of adequate, consistent, reliable and up-to-date data on Pakistan's Environment (A Unified Collection, Storage and Access System for Primary Data managed by Pakistan Bureau of Statistics). Four studies are conducted under this target. Overall, the reports are OK, however some errors were found in two reports. The study regarding “review of current system of generation, collection and compilation of environmental information in different selected Pakistani departments” has some old and outdated information. The data repository report for KP reflects data of GB. Though, a technical review committee comprising IPs and academia was established under the GGEB project to ensure quality of studies (MoCC meeting NFR, dated 04 March 2019). The project team also shared study reports with the committee. Moreover, formal written commitment from the PBS, P&Ds and EPAs need to be ensured regarding formal adoption of the recommended frameworks and data collection and compilation tools.
- Outcome indicator-2. Quality and reliability of environment data (Quality assurance tools are developed and pilot tested in 4 agencies gathering primary environment data each in Punjab and KP): Two activities were reported under this indicator; a. Designed and created an innovative dashboard for selected projects of Ministry of Climate Change (MOCC) for summarizing and reporting their data, which would ultimately allow users to make decisions based on the reliable and up-to-date information, and; b. Identified and finalized environmental indicators for federal, Punjab and KP to support EMIS. The first one is not relevant to the outcome indicator (QC/ QA protocols) while the second is partially relevant as it describes the relevant indicators and their variables. However, specific QC/QA protocols need to be developed.
- Outcome indicator-3. A compendium of Pakistan's environmental statistics, with enhanced contents, regularly published (The Compendium of Environmental Statistics for Pakistan are published regularly every year with improved contents matching the country's environmental reporting requirements): Study conducted regarding review of the existing protocols adopted by various selected stakeholders/ departments for gathering primary environmental data/mapping exercise of environment sector activities and projects, and extended support to PBS for publication of compendium 2020. Outdated information found in the report. No MoU signed with the PBS. A consultation process (consisting of three Round Table Conferences one each at federal, Punjab and KPK level for identification and removing of gaps in the existing protocols and then finalization of those gaps) was not followed. The review paper was supposed to be discussed further in RTCs. Environmental compendium 2020 has been published however by comparing the contents with the 2015 compendium no significant changes could be found. The target is achieved partially.

Overall rating of Outcome-1: 4 = Moderately Satisfactory (MS)

Outcome-2: A Coordinated and Robust Environmental Information Management System: The total GEF budget for this outcome as per original ProDoc was USD 265,000. No changes were made in the revised budget.

- Outcome indicator-1. A reliably functioning web (EMIS) portal hosting a multitude of data basis from participating organizations (National EMIS for Pakistan fully functional in year-1 and reliably operating

during the course of the project and afterwards): Two studies were conducted against this target; study on designing technical and institutional framework for the EMIS, and; study on designing IT framework for the EIMIS. Operationalization and inauguration of EMIS was reported in progress. Quality of the study reports is good. As stated in the outcome indicator the EMIS web portal was be functional in year-1, but the progress was still in progress (upgradation of server and provision of desktop computer, development of EMIS software). However, the NPD and the project staff were confident about completion of the planned work. Activities conducted and planned are relevant, and moderately effective; efficiency (especially in terms of timeliness) is not so promising. The remaining tasks under this indicator are more likely to be completed.

- Outcome indicator-2. Sustained participation and continuous updating of the respective environmental databases by the respective participating organizations in National EMIS (An effective management and coordination structure securing sustained participation and contributions of the existing EMIS partner organizations is established in year-1 and sustainably operated thereafter, making it more inclusive and broader over time): Three studies conducted to identify key policy shifts or major developments that are required to integrate environment and development in Punjab, KPK and ICT. Focal persons from PBS, EPAs, P&Ds, FDs, academia nominated and engaged. Two professional networks established in FJWU and DES of UoP. Interns engaged. Twelve (12) research studies conducted through the DES of the UoP. The focal persons and their assistants participated in the GGEB events and the PSC meetings. However, formal implementation and coordination committees at provincial level (one each at KP and Punjab P&D Departments) as described in the project document and the inception report are not established. FJWU and the DES of the UoP were engaged in holding workshops and seminars and conducting of research studies. MoU with the DES of the UoP signed and copy shared with the TE consultant. However, MoU with FJWU could not be finalized. Twelve (12) research were studies conducted through the DES of the UoP. Good gender ratio maintained in hiring of interns (4 female and 2 male interns). Inconsistency in nomination and appointment of the lead coordination body for the EMIS was found; Pak EPA (proposed in the original ProDoc)-Environment and Climate Change unit of MoCC (proposed in the inception report)-Pak EPA (at present)). Changes made during the inception phase recommended to make the directorate general of environment and climate change as the lead coordinating body of the EMIS however this was not followed. This situation reduced the effectiveness of coordination and ownership for the GGEB work. However, despite some of the abovementioned deficiencies the activities conducted under this indicator are to some extent relevant moderately contributing to the achievement of the desired outcome. Efficiency in terms of timeliness, implementation strategy, engagement of stakeholders, partnerships is moderately satisfactory with some gaps like not following the proper design (establishment of the committees for coordination and implementation).
- Outcome indicator-3. Pakistan's Annual State of Environment Report(s) (Pakistan's First State of Environment Report published in year-1 and, one more annual report produced thereafter. The target of two annual SoE Reports has been changed to three SoE reports (one each at ICT, KPK and Punjab level): Report on "Guidelines for developing provincial SoE Report" shared. Quality of the report is good. Coordination with Pak EPA, KP EPA and the Punjab Planning and Development Board was verified during the interviews. However, final consensus on the updating and publishing of the KP environmental profile as SoE report has not been reached with the new DG KP EPA. Coordination with KP EPA was affected due to transfer of the DG EPA and the new DG EPA is not very much on board. Moreover, plans for development of the Punjab SoE report are also not clear. The spadework

regarding development of guidelines and the required data has been completed, what remains is just updating the existing federal SoE report and the provincial environmental profiles (especially of KPK) as well as reaching consensus with the DG KP EPA. If properly followed up the federal and KP SoE reports could at least be finalized during the remaining period of the project. The target is likely to be achieved partially.

- Outcome indicator-4. Consistency and complementarities in reporting environmental information by the Federal Government and the provinces (Bench marking of Environmental Statistics of Pakistan with the EMIS Identified Environmental Data Requirement): Developed a template for environmental profile / State of Environment report for Punjab and KP. The process of benchmarking as outlined in the project document was not properly followed. According to the project document the concept of bench marking was to make the provincial and national SoE reports comparable with each other. This was to ensure that the provincial SoE reports have all the requisite data and information that the national SoE report needs to reflect for the provinces. However, the studies conducted indicate the standard outline and structure for the SoE reports, steps to be followed and the required information to be reflected in the SoE reports. The study as reported under the achievement is quite helpful in filling the gap of benchmarking. However, the project team should properly guide the Pak EPA to takeover this responsibility of completing the process of benchmarking in future. The completed task under this indicator is expected to achieve the desired result.
- Outcome indicator-5. Enhanced and improved country reporting against the three multilateral environmental agreements of CBD, UNFCCC and CCD (A total of three Country Reports under CBD, UNFCCC and UNCCD due during the project are produced in time with enhanced content and quality): As reported in the project APRs and also in the self-assessment by the project team, the four background papers are drafted and are under review. Once finalized will be shared with the concerned focal points for the UNCCD, UNFCCC, UNCCD and NDCs revision. Moreover, it was reported that the project will provide technical support in the form of the review papers/ studies while the country reporting will remain the responsibility of concerned focal persons/departments.
- Outcome indicator-6. Synergy between environmental research, reporting and practice (Institute and pilot test need-based research collaboration between MoCC including directorate general of environment and Pak EPA, Provincial P&Ds together with EPAs, and two universities, one each in Punjab and KP, involving a total of 12 short research assignments during the project period): All of the targets under this indicator are complete except signing LOA with the FJWU. Quality of work is satisfactory.

The overall rating of outcome-2 regarding progress made, its relevance, and effectiveness is 4 = Moderately Satisfactory (MS)

Outcome 3: Enhanced commitment and capacity for sustainable development planning and

legislation: The total GEF budget for this outcome as per original ProDoc was USD 559,500 however according to the figures provided by the GGEB PMU the revised/ expended budget for this output was USD 551,944 with an increase of USD 7,556 (1.35%).

- Outcome indicator-1. Understanding of environment issues among planners for economic development in public sector (A core of 400 officers in economic development ministries and departments are exposed to the essentials of environment, through 90 workshops or seminars at respective ministries or departments and 12 guest-lectures in relevant training institutions):

Organized 12 lectures, 18 workshops/ seminars/ webinars/ trainings, and two RTCs. As per ProDoc/ Addendum the RTCs were supposed to discuss the identification and removing of gaps in the existing protocols instead of sensitization. Implementation approach as proposed in the inception report and addendum to project document was not followed; NIPA was not engaged in the lectures. A total of 18 workshops/ seminars/ trainings/ webinars could be conducted against the target of 45 workshops or seminars. However, the target of training 400 government officials was well achieved with reduced number of events. Major limiting factor of not organizing the required number of events was mainly the Covid-19 pandemic. The project management tried to fill this gap by organizing the virtual webinars but as reported by the project team the quality of the webinars was not up to the desired level. The project management tried to take a government services training institute on board however due to some procedural issues they could not do so. Key resource persons from line departments and universities were engaged in the events, and partnerships were established with universities. The progress is complete with minor deficiency.

- Outcome indicator-2. Access to environmental expertise and competence required for informed economic decision making (Develop, design and pilot test an alternate market-based approach to capacity development for environment): Policy analysis studies conducted through experts engaged from open market. Research agenda developed in consultation with the Pak EPA and DG Environment and Climate Change units of the MoCC. The target of 12 research studies was completed through the DES of the UoP. The DES of the UoP was also engaged in the capacity building activities. However, a formal linkage of the academia and other experts' groups needed to be established with the IPs through formal MoUs for future continuity. The progress is complete with minor deficiency.
- Outcome indicator-3. Public opinion and support for environment protection and friendly development: (Two popular TV drama serials to increase the environmental understanding and support of masses, reachable by popular TV, and thus stimulate popular demand for environment protection and sustainable development; Likewise target opinion leaders in media (press and electronic) through 12 site visits to high profile projects): Progress on these targets is incomplete. Two animated videos, factsheets and compiled project reports were prepared. Moreover, the developed material is still under the process of review. Dissemination of these products is also planned to be done through the GGEB project website (only project reports are displayed and are available on demand). The project, established linkages with the media representatives including TV channels and newspapers through their engagement in awareness events and visits. Good media coverage of GGEB projects events and their messages is reflected in the events reports. Quality of the animated videos need to be improved as well as proper dissemination strategy is needed to ensure that the awareness materials are shared with the target audience. Moreover, feedback on the awareness materials is planned. Keeping in view the limited time left it is unlikely that any feedback would be collected on the awareness material. However, feedback plan and methodology should be developed by the GGEB and the Pak EPA properly briefed to implement it once it assumes the full charge of the EMIS.
- Outcome indicator-4. Political Commitment and Support for protecting environment and mainstreaming sustainability in economic development (a. Expose the existing standing committees on environment in different houses of public representatives, create new ones where needed though a total of 24 briefing sessions.; b. Engage a broader spectrum of politicians both at federal and provincial level by organizing site visits to high profile development projects for discussions on their economic and environmental promises and implication. About 9 such visits are envisaged; c. Increase the number of development projects whose design is positively shaped by environmental

considerations, and; d. Engaging the current leadership to contribute to the project objectives, specifically related to environment information management): Only 02 onsite briefing could be organized against the total target of 24. This was mainly due to the Covid-19 pandemic. Information on the increased number of development project with enhanced environmental considerations, could not be provided. The gap due to Covid-19 pandemic was partially met by adopting to the virtual means by engaging some officials and decision makers through webinars. The progress is partially complete.

The overall rating of outcome-3 regarding progress made, its relevance, and effectiveness is 5 = Satisfactory (S)

5.1.6 Sustainability

Overall risks to sustainability were found high. Financial risks are moderate. At the moment Pak EPA is facing issues regarding financial and human resources. However, it was informed during the interviews with the NPD, DG EPA and provincial focal persons that some new projects were approved that would resolve financial issues. Pak EPA has gotten the PLAN project under the 10BTTP project. Punjab P&D Board and Punjab Environment Protection Department have gotten the World Bank funded “Punjab Green Development Programme”. In KP no such projects were reported however the KP P&D has its Bureau of Statistics, which has its regular resources to carry forward the work of GGEB project. Moderate risks to financial sustainability exist, as the GGEB project work may not be the priority of these projects. Pak EPA should develop a separate PC-1 to carry the GGEB work forward. There are no or negligible socio-economic risks to the GGEB project work as it supports environment, the further support sustainability of development projects. This was endorsed by all of the respondents interviewed. Risks to the sustainability of institutional a framework and governance are high. Provincial implementation and coordination committees could not be established, and formal MoUs could not be signed. However, the market-based approach adopted and introduced under the project for generating, sourcing and supplying information (engagement of FJWU and DES of the UoP in research and capacity building activities) will contribute to some extent to the institutional sustainability regarding EMIS research and capacity building work. According to the respondents interviewed as well reviewing the project documents, the GGEB EMIS work is environmentally sustainable as the EMIS is the main requirement of all environment and development projects and will be continued.

Overall rating: 3 = Moderately Likely (ML)

5.1.7 Catalytic Role / Replication Effect

As reported by the project team and also evident from the events reports the GGEB project extended its training, and awareness and sensitization activities to other provinces and partners. In addition to the two provinces of KPK and Punjab it also conducted these events in Sindh and Balochistan and established partnerships with the NED university Karachi, Turbat University Gawader and BUITEMS Quetta. Moreover, response of the target beneficiaries of the workshops, and seminars shows quite good sensitization about the need of a robust EMIS and availability of environmental data and information as well as the mainstreaming of environmental consideration in development. Due to delays in the GGEB activities especially the EMIS, replication and scaling up could not be done during the project period however, potential is still there. However, as informed during the interviews at Pak EPA, MoCC and Punjab P&D Department that new projects (10BTTP, PLAN and PGDP) have also included the EMIS components.

5.1.8 Progress to Impact

High level impacts of the project activities are not visible at this stage due to delays in implementation. However, some low-level impacts could be assessed during the TE. Respondents from the IPs acknowledged the need for an improved and robust EMIS and showed willingness and readiness to improve data collection, compilation and sharing under the EMIS. This is expected to contribute a high-level impact of enhanced availability of consistent and reliable environmental data and information. Impact regarding enhanced awareness and capacities for mainstreaming environmental considerations in development was moderately found during the interviews and beneficiaries survey. Eighty percent of the beneficiaries surveyed had high impression of the quality and usefulness of the GGEB events; 75% supported environmental integration in development projects, and 38% also shared the recommendations of the workshops with their respective organizations. Regarding mainstreaming environmental considerations in development no direct impact of the GGEB project could be assessed however from the review of various publications of the MoPD&R and the provincial P&D departments it was found that guidelines and tools have been developed by these organizations to ensure integration of environmental considerations in developmental projects. These include the “Manual for Development of Projects, 2021” applicable to both federal and provincial level projects.

5.2 Conclusions

5.2.1 Project formulation

The GGEB project was found highly relevant. The project builds on the issues related to availability of environmental data and information, and integration of environmental considerations in development identified during the consultation process for project formulation. These issues are also recognized by national policies, strategies and plans including the implementation of the recommendations of the multilateral environmental agreements (UNFCCC, UNCBD and UNCCD). High relevance of the GGEB project was also acknowledged by the respondents during the interviews for the TE. Except some minor deficiencies the project is well designed having all relevant sections properly elaborated and explained including a project results framework, implementation and management arrangements, stakeholders’ participation, risks mitigation measures, gender mainstreaming measures and monitoring framework.

5.2.2 Project implementation

Implementation of the project remained moderately satisfactory. Suitable implementation strategy was followed by the project team; establishment of the PSC, identification of IPs and their focal points, regular liaison of the project management with the MoCC and other stakeholders, following proper government procedures regarding approvals, and timely preparation and approval of AWP and APRs. Implementation strategy regarding research, capacity building, and awareness raising remained effective. Good partnerships were established and participation remained encouraging in the GGEB project events. Stakeholder participation remained moderately satisfactory limited to main IPs while others like provincial line departments and NGOs were mainly engaged in trainings, workshops and seminars. Some changes made in the project strategy affected coordination, resulted in delays of activities and enhanced risks to future sustainability. These changes included replacement of project component coordinators with appointment of focal points and their assistants, and replacement of MoUs with coordination meetings and written correspondence. Response to issues and challenges was found satisfactory. The response from the project management included; regular coordination and liaison of the project team with the MoCC and EAD to develop clarity on NIM implementation modality; virtual meetings and webinars were held to mitigate the risk of Covid-19 pandemic; alternate focal

points/ assistants were nominated to cope with the high turnover of the principal focal points of the project.

5.2.3 Project finance and co-finance

Financial delivery of the project remained satisfactory (84%). Status regarding GEF financing and UNDP's financing remained satisfactory and according to the commitment. However, the GoP committed parallel financing could not be provided. Major reason was that the staff at the component implementing partners could not be hired due to lack of clarity in the revised changes to the project document (inception report and addendum). In-kind co-financing of GoP remained more than commitment (104%).

5.2.4 Project results

Progress towards objective is partially achieved and is moderately satisfactory

Development of a fully functional and sustainable EMIS for Pakistan though delayed but is likely to be completed by end of the project. All background studies have been conducted; relevant data collected and compiled (with minor deficiencies); IT, technical and institutional frameworks developed. Work on upgradation of hardware and development and installation of software is in progress and is likely to be completed. The SOE reports for ICT is expected to be updated while the SOE reports for KP and Punjab are unlikely to be developed and published. Sustainability of the EMIS has high risks mainly due to absence of proper coordination bodies at IPs level.

Good progress was made on enhancement of capacities for integrating environment in economic development, and development and pilot testing of market mechanism for sourcing and supplying environmental information. 1300 environment and development professionals (40% females/ 60% males) including 400 government officials sensitized and trained through (12 lectures, 18 Seminars/ workshops/ trainings/ RTCs, 4 on-sites visits. Response from participants showed that the events were organized effectively and imparted relevant knowledge and skills. Two universities were engaged in policy research and capacity enhancement.

Activities regarding informed public opinion for environmental protection and sustainability partially completed with deficiencies. Press briefings and site visits for media representatives organized. Developed knowledge products related to EMIS and environment comprising of brochure, GEB updates, compiled reports, factsheets, awareness material and documentary. Quality of documentaries is low and needs improvement. Most of the material were in the process of review. Dissemination of material is not yet done. The target regarding better understanding of the environment and of the need for protection and sustainable use is still to be achieved.

Partially achieved targets regarding enhanced and sustained political support for mainstreaming sustainability in economic development. Two onsite briefings for political fraternity arranged to sensitize them on green economic development and upraise them on the latest information on environmental impact assessments. The target regarding increasing number of economic development projects benefiting from adequate and competent environmental impact assessment is still to be achieved. However, some improvement in the guidelines and tools for development and implementation of public sector projects has been noted from review of documents.

The project has mostly delivered results related to outcome-1 and 3 while outcome-2 is likely to be completed by end of the project. Overall progress to expected outcomes is moderately satisfactory.

Progress towards outcome-1 “Availability of Consistent and Reliable Environmental Data” is moderately satisfactory. With some deficiencies most of the targets related to outcome-1 have been delivered. These include; need assessment for the development of EMIS in KP, study on generation, collection and compilation of environmental information; review of various EMISs across the globe for exploring best practices; development of environmental data repository for ICT, Punjab and KP; and mapping of stakeholders for collection and generation of environmental data and information in ICT, Punjab and KP. Targets regarding development and pilot testing of quality assurance of environmental data could not be achieved. The project, instead, developed a beta version of project dashboard for MoCC, which, though an innovative approach to ensure effective monitoring of projects of MoCC, is not relevant to the concept of quality assurance of collection and compilation of primary data by the line agencies. Targets regarding regular publication of compendium were achieved partially with some deficiencies. The study regarding review of protocols regarding environmental data collection and compilation has some deficiencies and needs improvement. A consultation process consisting of three Round Table Conferences one each at federal, Punjab and KP level for identification and removing of gaps in the existing protocols and then finalization of those gaps, was not properly followed. The review paper was supposed to be discussed further in RTCs. Environmental compendium 2020 was published however, it has no significant changes as compared with the Environmental Compendium 2015.

Progress towards outcome-2 “A Coordinated and Robust Environmental Information Management System” was found moderately satisfactory. Outcome-2 is related to outcome-1. All the background and preparatory work conducted under outcome-1 also contribute to the targets under outcome-2. The target of “a fully functional National EMIS for Pakistan” was in progress however, all necessary background work and preparations have been completed. These include designing of technical, institutional and IT frameworks for the EMIS. Work on the upgradation of hardware and development of software was in progress and is likely to be completed by end of the project. The target of “development of effective management and coordination structure securing sustained participation and contributions of the existing EMIS partner organizations” was partially achieved with some deficiencies. Studies on key policy shifts and major developments for integration of environment and development in Punjab, KP and ICT conducted; focal persons from PBS, EPAs, Provincial P&D Departments, Provincial Forest Departments nominated and engaged, and; two professional networks established in FJWU and DES of UoP. Target regarding publishing of Pakistan Annual State of Report has been partially completed. Guidelines and template for the SOE report have been developed and shared, however drafting and publishing of the SOE reports are still not finalized. Major reason for the delays were high turnover of the provincial focal points due to retirement and transfers. Likelihood of the ICT level SOE report (to the extent of drafting and updating) is moderate while those of KP and Punjab are very low. Bench marking of Environmental Statistics of Pakistan with the NEMIS projects Identified Environmental Data Requirement. Targets regarding benchmarking for consistency and complementarities in reporting environmental information by the Federal Government and the provinces have been partially achieved. Template for environmental profile / State of Environment report for Punjab and KP developed, however the process of benchmarking of the national and provincial SOE reports could not be conducted due to incompleteness of the development of the SOE reports. However, the standard outline and structure for the SoE reports provided in the templates is expected to ensure consistency in reporting. Targets

regarding improved country reporting in MEAs (UNFCCC, UNCBD, UNCCD) were also partially achieved by drafting of four background papers related to revision and improvement of the UNCBD, UNFCCC, UNCCD and NDCs reporting. The papers were draft and not yet shared with the focal points of the conventions. A due consultation process was not yet done. Targets regarding development of research collaboration between MoCC (including its wings and units) and universities have been mostly completed. Research collaboration established between the MoCC and the University of Peshawar, and 12 research studies and capacity building events conducted. Good partnerships with other universities including FJWU, NED university, BUTAM, Gwadar University, Faisalabad University and COMSATS were also established for workshops and capacity building initiatives. The activity also contributed to the development and pilot testing of the market-based approach to capacity development for environment.

Regarding outcome-3 most of the targets are satisfactorily delivered, though with some deficiencies. The target of training and sensitizing 400 government officials is well achieved by training and sensitizing 1300 participants including 400 government officials. The target was achieved with 18 number of events against 45, which shows the cost effectiveness of the activity by engaging other partners and sharing of resources. Targets regarding improved public opinion and support for environment protection and friendly development was partially achieved; Organized two visits of media representatives and selected stakeholders; Developed knowledge products related to EMIS and environment, and; developed two documentaries. The project established good linkages with the media representatives and ensured good media coverage of GGEB project events. Most of the awareness products were not yet finalized and are expected to be complete by end of the project. Feedback survey of target audience was not yet done. Dissemination of the awareness products was partially done. Quality of the documentaries need improvement. Progress on targets regarding briefing sessions and site visits for political and opinion leaders, and increasing the number of development projects with integrated environmental considerations was found low. Only 02 onsite briefings and one site visit were organized against the total target of 24 briefings and 9 site visits for political and opinion leaders. Major reason for these under achievement was reported as the Covid-19 pandemic.

Sustainability

Moderate risks to financial sustainability exist as there are new projects both in MoCC and Punjab as well as existing setups in Punjab and KP that may cover the resource deficiencies. Similarly, negligible risks exist to socioeconomic and sociopolitical sustainability as the project ensures environmental sustainability of development projects. However, risks to sustainability of institutional framework and governance are high due to lack of proper coordination bodies and structures as well as lack of formal agreements and MoUs among the IPs and line agencies. Overall, the risks to sustainability are high (02=Moderately Unlikely (MU)).

5.3 Recommendations

Recommendations are reflected in the following table. The table comprise of the overall recommendations, specific actions, responsible organizations, responsible parties and timeline for action. Recommendations are related to programmatic aspects, completion of the remaining work of the project and future continuity and sustainability.

Table 13: Summary recommendations

Recommendations	Action	Responsible organization/ party	Timeline
1. Development and approval of PC-1: One of the main reasons of delays in GGEB project was the development and approval of PC-1. The process should start at the early stages of the ProDoc development and approval.	For future GEF funded projects, the IP/MoCC should consider and resolve such issues at PIF/project formulation stage	MoCC	Mar 2022
2. Frequent changes of NPDs and project co-signatory: As recommended in the inception report and the addendum to ProDoc concerned technical heads of wings/ units/ attached departments of the MoCC should be nominated as the technical focal points/Co-NPDs and co-signatory of the project to fill the gaps. The NPD will be responsible for the overall supervision while the technical heads/ focal points will supervise the management, implementation and technical aspects of the projects.	For future GEF funded UNDP projects, the Implementing Partner (IP)/MoCC to consider appointing technical heads of relevant Wing/Unit/ Department as NPD/Deputy NPD in compliance with UNDP NIM guideline and use applicable government regulations/internal controls/processes for smooth implementation of projects.	MoCC	Mar 2022
3. High turnover of focal points of the federal and provincial IPs: A good lesson regarding meeting the gaps due to high turnover of the focal points in provinces was to identify the alternate focal points (second in-charge in the office). These arrangements need to be adopted in future projects as well.	For future GEF funded UNDP projects, the IP/MoCC and provincial IPs to consider the good practice adopted by the provinces to cover gaps.	MoCC	Mar 2022
4. MoCC's supervision: Close liaison of the NPD and project team to ensure implementation of the planned activities. The NPD should have clear plan of action to ensure effective oversight and monitoring of the project activities (especially when there is no M&E position in projects).	<ul style="list-style-type: none"> i. In future GEF projects the NPDs should have clear plan of action regarding supervision and monitoring of projects activities based. ii. Findings of the NPDs supervisory/ monitoring visits and meetings should also be reflected in the APRs. iii. Future projects should have M&E positions. 	MoCC (I, ii) UNDP ECCU (iii)	Mar 2022
5. Changes in the project management and implementation strategy	For the future GEF-funded UNDP projects, approval for any changes in the organizational/project	MoCC	Mar 2022

<p>without proper approval: Some changes like non establishment of the implementation committees at provincial level and non-engagement of the provincial coordinators and their IT staff are neither documented nor any approval of competent forums/ authorities were provided by the project management. Such changes need to be properly approved from concerned forum and properly documented as well as explained in the APRs.</p>	<p>coordination structure to be discussed and approved in the Project Board meetings. Moreover, such changes should be reflected in the AWP and APRs.</p>		
<p>6. Completion of reminding planned activities and tasks: Some activities are reported by the project management as in progress. Project management should ensure completion of the planned activities and tasks.</p>	<p>vi. EMIS establishment and operationalization at Pak EPA; vii. Finalization and publication of SOE report (ICT level) viii. Finalization and dissemination of awareness material. Pak EPA should be briefed and guided to upload and share the awareness material on its website. ix. Develop and share QC/ QA protocols. x. Finalize and share the four background/ review papers related to UNCBD, UNFCCC, UNCCD and NDCs revision with the focal persons.</p>	<p>• NPC GGEB Project (I, ii, iii, iv, v)</p>	<p>Feb-Mar 2022</p>
<p>7. Written commitment from the implementing partners about adoption of the GGEB recommended frameworks and tools for data collection: Formal MoUs with IPs and line departments could not be signed. There is risk to adoption of the GGEB frameworks and smooth data sharing. In such situation the IPs should give their written commitments. Some activities could not be conducted as per the ProDoc concept such as benchmarking of the SOE reports mainly due to delays in implementation. There is need for proper guidance of the Pak EPA to complete this process.</p>	<p>The NPD/ MoCC should write a letter to federal and provincial IPs (PBS, Pak EPA, Provincial P&Ds and Provincial EPAs) for adoption of the GGEB recommended frameworks and tools for data collection as well as regular data sharing.</p>	<p>NPD GGEB Project (MoCC),</p>	<p>Feb-Mar 2022</p>

8. Improvement of EMIS system (server): The IT consultant recommended the cloud-based server instead of the in-premises server to avoid unnecessary operation, maintenance and data security issues. Pak EPA may consider this option in future.	The NPD should send a letter to Pak EPA to consider the option of cloud-based server for the EMIS under the new PLAN project.	MOCC/ NPD	Feb-Mar 2022
9. GoP's co-financing commitment: In-kind co-financing commitment of GoP remained satisfactory (105%). However, cash co-financing commitment could not be fulfilled. UNDP CO should closely and regularly monitor the status of co-financing, by holding review meetings both with the project team, NPD, MoCC and IPs.	ii. In order to ensure that the GoP complies with its co-financing commitments UNDP CO should develop a clear strategy/ plan of action to closely monitor and follow up on the status of co-financing (in future GEF funded projects)	UNDP-CO	Feb-Mar 2022

5.4 Lessons Learned

Proper documentation of lessons could not be shared with the TE consultant. However, the following lessons were drawn from the discussion with the project team and IPs as well as review of project documents.

- **Proper documentation and preparation led to successful coordination with the MoCC:** GGEB project being one of the initial projects to be implemented under NIM modality in Pakistan. Initially some procedural guidelines had been prepared by the EAD for NIM projects implementation, which lacked clarity on several financial, procurement and implementation aspects. The GGEB project faced these issues. The GGEB project team in consultation with the UNDP CO team after proper documentation and preparation successfully convinced the MoCC and EAD, and resolved the matter.
- **Proper understanding of government rules and procedures by the project team especially the NPC led to effective coordination with the MoCC:** According to the agreed procedures NIM project implementation requires approval of MoCC/ NPDs on proper government filing system. This needs proper knowledge on the part of the project team especially the NPC. Good ownership of the MoCC for the GGEB project was also due to adopting proper government procedures and filing system by the NPC and his team. The Assistant Project Officer had been appointed as the focal person for close follow up on the files sent to MoCC for approvals.
- **Alternate focal points to overcome the issue of high turnover of focal points of the federal and provincial IPs:** A good lesson regarding meeting the gaps due to high turnover of the focal points in provinces was to identify the alternate focal points (second in-charge in the office). This resolved the issue of transfer or retirement of the focal persons and resulted in continuity of the GGEB project activities.

- **Uncertainty of the overall EMIS leading body (Pak EPA-the Directorate General of Environment-Pak EPA) led to low ownership of the project and lack of interest:** According to the original ProDoc the lead coordinating body was the Pak EPA (as it also hosted the NEMIS and the Pakistan Geomatic Project). However, due to issues of coordination with provincial EPAs after the 18th constitutional amendment, as well as focal point for the national SOE reports the overall lead coordinating body was recommended to be the DG Environment. But on the ground situation changed again and the Pak EPA was declared as the lead coordinating body. The lesson drawn from this situation is that too much deviation from the original strategies often lead to uncertainties and affect the project results.
- **The market-based approach to research and capacity building remained successful mainly due to the high interest of the partners (FJWU and the DES of the UoP):** Both the Fatima Jinnah Women University (FJWU) and the Department of Environmental Sciences of the University of Peshawar took keen interest that led to the successful implementation of the research and capacity building activities.

6. Annexes

Annex-1: ToRs for TE

TERMS OF REFERENCE NATIONAL INDIVIDUAL CONSULTANT FOR TERMINAL EVALUATION OF GGEB PROJECT

Project Title	Generating Global Environmental Benefits from Improved Decision-Making Systems and Local Planning in Pakistan
Post Title	National Technical Consultant – Terminal Evaluation
Duty Station	Field / Home based
Duration	35 working days spread across 03 months
Contract	Individual Technical Consultancy Contract – Short Term

1. INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full- and Small-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. This Terms of Reference (ToR) sets out the expectations for the TE of the full-sized project titled *“Generating Global Environment Benefits Project (PIMS# 4939)”* implemented through *Ministry of Climate Change*. The project document was signed on 9th March 2016. However, the project could not take off in time due to various reasons including hiring, termination and re-hiring of project staff by the Ministry of Climate Change. The project inception workshop was held on 17th December 2018. The project's results framework was revised and made simplified at the inception workshop in due consultation with the MoCC, Government departments and stakeholders to cater for the changes in environment sector and government (IP) set up from 2013 (PPG approval) to 2018 (Inception). The project original closure date was 8th March 2019, however, it was granted no cost extension at the request of MOCC by GEF Secretariate. The revised date of Operational Closure of the project is now 9th March 2022.

The project started on December 2018 and is in its 3rd year of implementation. The TE process must follow the guidance outlined in the document *‘Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects’* ([Guidance for Terminal Evaluations of UNDP-supported GEF-financed Projects](#)).

2. PROJECT BACKGROUND AND CONTEXT

Programme Period:	36 Months (3 Years)
Total resources required:	USD 1,935,550
Total allocated resources:	
• GEF	USD 995,500
• Co-financing	USD
◦ Government(Parallel/Inkind)	USD 722,350
◦ UNDP	USD 217,700

- The project's **overall goal** is 'Generating Global Environmental Benefits from Improved Decision Making in Pakistan. Its specific **objective** is 'to remove the barriers to environmental information management and mainstreaming global environment concerns into economic decision making'. The objective is two-fold in its focus, one related to environmental information, and the other to employing this information for improved economic decision making. Thus the project has **two components** of: (a) establishing a robust environmental information management system; and (b) stimulating commitments and filling gaps in capacities for integrating environment and

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development as laid down in PIF. However, as clarified in the introduction, the first focus on environmental information is composite in nature and has therefore been divided into two separate but related outcomes for an effective implementation. Accordingly, the project will have three interrelated **outcomes**:

- (1) Regular availability of consistent and reliable environmental data;
- (2) A coordinated and robust environmental information management system, and,
- (3) Enhanced commitment and capacity for sustainable development planning and legislation

The project falls under the GEF -5 Focal Area of Cross-Cutting Capacity Development. It addresses all five objectives, more notably the second, 'to generate, access and use information and Knowledge' and the third, 'to strengthen capacities to develop policy and legislative frameworks'. The project is in line UNDP's Strategic Plan and Country Programme Document (CPD) Output 6.3: Legal and regulatory framework and policies are in place, and institutional capacitated for the conservation, sustainable use, inclusive access and benefit-sharing of natural resources, biodiversity, chemicals, waste management and eco-systems. In fact there is a strong convergence of interests in enabling Pakistan to secure the sustainability of its long term economic development by protecting its natural resource base and to enhance its global contribution to environment and sustainable development.

3. TE PURPOSE

The TE will assess the achievement of project results against what was expected to be achieved and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The TE report promotes accountability and transparency and assesses the extent of project accomplishments. The results of TE along with the management responses will be shared with MoCC and other relevant government departments as a means for further learning and sharing of experiences. UNDP will also benefit from the results of TE in terms of improving upon future project designs.

4. TE APPROACH & METHODOLOGY

The TE report must provide evidence-based information that is credible, reliable and useful.

The TE national consultant will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP) the Project Document, project reports including annual PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the consultant considers useful for this evidence-based evaluation. The TE consultant will review the baseline and GEF focal area /Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal /Tracking Tools that must be completed before the TE field mission begins.

The TE consultant is expected to follow a participatory and consultative approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office(s), the Regional Technical Advisor, direct beneficiaries and other stakeholders.

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Engagement of stakeholders is vital to a successful TE. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to Ministry of Climate Change, Economic Affairs Division (EAD), Pakistan Bureau of Statistics (PBS), Federal Environment Protection Agency, , Provincial Environment Protection Agencies (KPK and Punjab), , Executing Agencies, Senior Officials and task team/component leaders, key expert and consultant in the subject area, Project Board, project stakeholders, academia, local government and CSOs, etc. Additionally, the **National Consultant** is expected to conduct field missions to KPK and, Punjab and meet with the local communities if permitted by UNDP as per the SOPs under COVID-19 pandemic.

The specific design and methodology for the TE should emerge from consultations between the TE consultant and the above-mentioned parties regarding what is appropriate and feasible for meeting the TE purpose and objectives and answering the evaluation questions, given limitations of budget, time and data. The final approach and methodology must be documented in the inception report and agreed upon by both the parties. The TE consultant must use gender-responsive methodologies and tools and ensure that gender equality and women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the TE report.

Engagement of stakeholders is vital to a successful Final Evaluation. Stakeholder involvement should include (where possible, given the COVID situation) surveys/questionnaires, focus groups, interviews with stakeholders who have project responsibilities, including but not limited to executing agencies, senior officials and task team/component leaders, key experts and consultants in the subject area, Project Steering Committee, project stakeholders, local government, CSOs, project beneficiaries, etc. If not all stakeholders are available to engage virtually, this must be documented in the Evaluation report with justification.

Data collection will be used to validate evidence of results and assessments (including but not limited to assessment of Theory of Change, activities delivered, and results/changes occurred).

The final Evaluation report should describe the full evaluation approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review. The final report must also describe any limitations encountered by the Evaluation consultant during the evaluation process including limitations of the methodology, data collection methods, and any potential influence of limitation on how findings may be interpreted, and conclusions drawn. Limitations include, among others: language barriers, inaccessible project sites (due to travel restrictions because of COVID), issues with access to data or verification of data sources, issues with availability of interviewees, methodological limitations to collecting more extensive or more representative qualitative or quantitative evaluation data, deviations from planned data collection and analysis set out in the ToR and Inception Report, etc. Efforts made to mitigate the limitations should also be included in the Interim Evaluation report.

The final methodological approach including interview schedule, field visits and data to be used in the evaluation must be clearly outlined in the TE Inception Report and be fully discussed and agreed between UNDP, stakeholders and the TE consultant.

As of 11 March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic as the new coronavirus rapidly spread to all regions of the world. Travel to the country although not restricted and travel in the country is well but to follow UNDSS SOPs for domestic travels which may not permit UNDP contract holder to travel. If it is not possible to travel within the country for the TE mission then the TE consultant should develop a methodology that takes this into account the conduct of the TE virtually and remotely,

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including the use of remote interview methods and extended desk reviews, data analysis, surveys, and evaluation questionnaires. This should be detailed in the TE Inception Report and agreed with the Commissioning Unit.

If all or part of the TE is to be carried out virtually then consideration should be taken for stakeholder availability, ability, or willingness to be interviewed remotely. In addition, their accessibility to the internet/computer may be an issue as many government and national counterparts may be working from home. These limitations must be reflected in the final TE report.

The National Consultant is expected to start the field mission. If a data collection/field mission is not possible then remote interviews may be undertaken through telephone or online (skype, zoom etc.). No stakeholders, consultants or UNDP staff should be put in harm's way and safety is the key priority.

The final report must describe the full TE approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the evaluation.

5. DETAILED SCOPE OF THE TE

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see ToR Annex A). The TE will assess results according to the criteria outlined in the Guidance for TEs of UNDP-supported GEF-financed Projects ([Guidance for Terminal Evaluations of UNDP-supported GEF-financed Projects](#)).

The Findings section of the TE report will cover the topics listed below.

A full outline of the TE report's content is provided in ToR Annex C.

The asterisk "*" indicates criteria for which a rating is required.

Findings

i. Project Design/Formulation

- National priorities and country driven ness
- Theory of Change
- Gender equality and women's empowerment
- Social and Environmental Safeguards
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks
- Lessons from other relevant projects (e.g. same focal area) incorporated into project design
- Planned stakeholder participation
- Linkages between project and other interventions within the sector
- Management arrangements

ii. Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
 - Actual stakeholder participation and partnership arrangements
 - Project Finance and Co-finance
 - Monitoring & Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)
-

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- Implementing Agency (UNDP) (*) and Executing Agency (*), overall project oversight/implementation and execution (*)
- Risk Management, including Social and Environmental Standards

iii. Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Relevance (*), Effectiveness (*), Efficiency (*) and overall project outcome (*)
- Sustainability: financial (*), socio-political (*), institutional framework and governance (*), environmental (*), overall likelihood of sustainability (*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting issues (poverty alleviation, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity development, South-South cooperation, knowledge management, volunteerism, etc., as relevant)
- GEF Additionality
- Catalytic Role / Replication Effect
- Progress to impact

Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE consultant will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.
- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women's empowerment.
- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best and worst practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE consultant should include examples of good practices in project design and implementation.
- It is important for the conclusions, recommendations and lessons learned of the TE report to include results related to gender equality and empowerment of women.

The TE report will include an Evaluation Ratings Table, as shown below:

ToR Table 2: Evaluation Ratings Table for (Generating Global Environmental Benefits from Improved Decision-Making Systems and Local Planning in Pakistan)

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Monitoring & Evaluation (M&E)	Rating ¹
M&E design at entry	
M&E Plan Implementation	
Overall Quality of M&E	
Implementation & Execution	Rating
Quality of UNDP Implementation/Oversight	
Quality of Implementing Partner Execution	
Overall quality of Implementation/Execution	
Assessment of Outcomes	Rating
Relevance	
Effectiveness	
Efficiency	
Overall Project Outcome Rating	
Sustainability	Rating
Financial resources	
Socio-political/economic	
Institutional framework and governance	
Environmental	
Overall Likelihood of Sustainability	

6. TIMEFRAME

The total duration of the TE will be approximately (35 working days) over a time period of 5 week

7. TE DELIVERABLES

#	Deliverable	Description	Timing / no of days	Responsibilities
1	TE Inception Report	TE consultant clarifies objectives and methods of Terminal Review	No later than 2 weeks before the TE mission:	TE consultant submits to the Commissioning Unit and project management
2	Presentation	Initial Findings	End of TE mission:	TE consultant presents to project management and the Commissioning Unit
3	Draft Final Report	Full report (using guidelines on content)	Within 3 weeks of the TE mission:	Sent to the Commissioning Unit, reviewed by RTA,

¹ Outcomes, Effectiveness, Efficiency, M&E, I&EE execution, Relevance are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4 = Likely (L), 3 = Moderately Likely (ML), 2 = Moderately Unlikely (MU), 1 = Unlikely (U)

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		outlined in Annex B) with annexes		Project Coordinating Unit, GEF OFF
4	Final Report*	Revised report with audit trail detailing how all received comments have (and have not) been addressed in the final TE report	Within 1 week of receiving UNDP comments on draft:	Sent to the Commissioning Unit

*All final TE reports will be quality assessed by the UNDP Independent Evaluation Office (IEO). Details of the IEO's quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.²

8. TE IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing the TE resides with the Commissioning Unit. The Commissioning Unit for this project's TE is UNDP Pakistan Country Office.

The Commissioning Unit will contract the evaluators and ensure the timely provision of per diems and travel arrangements to Pakistan and within the country for the TE consultant, if the travel is permitted. The Project Team will be responsible for liaising with the TE consultant to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

The national evaluator is required to meet with all the key stakeholders within Islamabad. For any visits outside Islamabad, the consultant will arrange his own travel and the relevant costs should be indicated in financial proposal.

Following to be noted for travel:

- The BSAFE course must be successfully completed prior to commencement of travel, if required;
- Individual Consultants are responsible for ensuring they have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director.
- Consultants are required to comply with the UN security directives set forth under: <https://dss.un.org/dssweb/>
- All related travel expenses will be covered and will be reimbursed as per UNDP rules and regulations upon submission of an F-10 claim form and supporting documents, as and if required.

9. TE TEAM COMPOSITION

One independent National Consultant (evaluator) will conduct the TE- (with experience and exposure to projects and evaluations in country. The TE Consultant will be responsible for the overall design and writing of the TE report. The consultant will assess emerging trends with respect to regulatory frameworks, budget allocations, capacity building, work with the Project Team in developing the TE itinerary, etc.)

The National Consultant (Evaluator) will work on any work that needs to be undertaken as laid out in this ToR, and other tasks, as required. The National Consultant will also act as a focal point for coordinating and working with relevant stakeholders in Pakistan. In the case

² Access at: <http://web.undp.org/evaluation/guidelines/section-6.html>

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of travel restriction and if travel is not possible, the TE consultant will use alternative means of interviewing stakeholders and data collection (i.e. Skype interview, mobile questionnaires, etc.) including the field visits.

The evaluator(s) cannot have participated in the project preparation, formulation and/or implementation (including the writing of the project document) and should not have a conflict of interest with the project's related activities.

The selection of National Evaluator will be aimed at maximizing the overall "consultant" qualities in the following areas:

Education

- Master's degree in Environmental Science, Environmental Information Management Systems, or other closely related field

Experience

- Experience in relevant technical areas of (Environment, Environmental Information Management Systems,) for at least 10 years;
- Experience in evaluating GEF, UNDP or UN agencies funded projects;
- Relevant experience with results-based management evaluation methodologies.
- Experience applying SMART indicators and reconstructing or validating baseline scenarios.
- Demonstrated understanding of issues related to gender and Environment, Environmental Information Management Systems, and experience in gender responsive evaluation and analysis;
- Project evaluation/review experience within United Nations (other than UNDP) system will be considered an asset.
- *Experience with implementing evaluations remotely will be considered an asset.*

Language

- Fluency in written and spoken English and Urdu.
- Fluency in other language (Pashto) will be an asset

10. TOR ANNEXES

(Add the following annexes to the final ToR)

- ToR Annex A: Project Logical/Results Framework
- ToR Annex B: Project Information Package to be reviewed by TE consultant
- ToR Annex C: Content of the TE report
- ToR Annex D: Evaluation Criteria Matrix template
- ToR Annex E: UNEG Code of Conduct for Evaluators
- ToR Annex F: TE Rating Scales
- ToR Annex G: TE Report Clearance Form
- ToR Annex H: TE Audit Trail

Annex-2: Evaluation Criteria Matrix

Evaluation Questions	Indicators	Sources	Data Collection Method
Evaluation Criteria: Relevance			
Does the project objective fit with the GEF strategic priorities (GEF focal area and its objectives)?	<ul style="list-style-type: none"> Level of coherence between project objective and GEF strategic priorities (including alignment of relevant focal area indicators) 	<ul style="list-style-type: none"> GEF strategic priority documents at the time of project approval. Current GEF strategic priority documents. ProDoc 	<ul style="list-style-type: none"> Desk review
Is the project in line with the UNDP programme objectives?	<ul style="list-style-type: none"> Level of coherence between project objective and the UNDP Country Programme priorities and objectives 	<ul style="list-style-type: none"> UNDP Country Programme Document ProDoc 	<ul style="list-style-type: none"> Desk review
Is the project in line with the national environment and development priorities?	<ul style="list-style-type: none"> Level of coherence between the project objective and national strategic documents (National Conservation Strategy (NCS), National Strategy for Sustainable Development (NSSD)) 	<ul style="list-style-type: none"> NCS NSSD NBSAP ProDoc 	<ul style="list-style-type: none"> Desk review
Did the project concept originate from local or national stakeholders, and/or were relevant stakeholders sufficiently involved in project development?	<ul style="list-style-type: none"> Level of involvement of local and national stakeholders in project origination and development (number of meetings held, project development processes incorporating stakeholder input, etc.) 	<ul style="list-style-type: none"> Project documents Project staff Local and national stakeholders 	<ul style="list-style-type: none"> Desk review Stakeholders' interviews
Does the project objective support the implementation of MEAs (CBD, UNFCCC, and CCD)?	<ul style="list-style-type: none"> Linkages of the project objectives and the MEAs (CBD, UNFCCC and UNCCD)? 	<ul style="list-style-type: none"> CBD, UNFCCC, UNCCD NBSAP NSSD ProDoc 	<ul style="list-style-type: none"> Desk review
Evaluation Criteria: Efficiency			
Is the project cost-effective?	<ul style="list-style-type: none"> Quality and adequacy of financial management procedures (in line with UNDP, and national policies, legislation, and procedures) Financial delivery rate vs. expected rate Management costs as a percentage of total costs Most cost-effective activity of the project 	<ul style="list-style-type: none"> Project documents Project staff 	<ul style="list-style-type: none"> Desk review Project staff Interviews

Evaluation Questions	Indicators	Sources	Data Collection Method
Is the project implementation approach efficient for delivering the planned project results?	<ul style="list-style-type: none"> • Adequacy of implementation structure and mechanisms for coordination and communication • Planned and actual level of human resources available • Extent and quality of engagement with relevant partners / partnerships • Quality and adequacy of project monitoring mechanisms (oversight bodies' input, quality and timeliness of reporting, etc.) 	<ul style="list-style-type: none"> • Project documents • National and local stakeholders • Project staff 	<ul style="list-style-type: none"> • Desk review • Interviews with project staff • Interviews with national and local stakeholders
Is the project implementation delayed? If so, has that affected cost-effectiveness?	<ul style="list-style-type: none"> • Project milestones in time • Planned results affected by delays • Required project adaptive management measures related to delays 	<ul style="list-style-type: none"> • Project documents • Project staff 	<ul style="list-style-type: none"> • Desk review • Interviews with project staff
What is the contribution of cash and in-kind co-financing to project implementation?	<ul style="list-style-type: none"> • Level of cash and in-kind co-financing relative to expected level 	<ul style="list-style-type: none"> • Project documents • Project staff 	<ul style="list-style-type: none"> • Desk review • Interviews with project staff
To what extent is the project leveraging additional resources?	<ul style="list-style-type: none"> • Extent of resources leveraged relative to project budget 	<ul style="list-style-type: none"> • Project documents • Project staff 	<ul style="list-style-type: none"> • Desk review • Interviews with project staff
Evaluation Criteria: Effectiveness			
Are the project objectives likely to be met? To what extent are they likely to be met?	<ul style="list-style-type: none"> • Level of progress toward project indicator targets relative to expected level at current point of implementation 	<ul style="list-style-type: none"> • Project documents • Project staff • Project stakeholders 	<ul style="list-style-type: none"> • Desk review • Stakeholders' interviews • Project staff interviews
What are the key factors contributing to project success or underachievement?	<ul style="list-style-type: none"> • Level of documentation of and preparation for project risks, assumptions and impact drivers 	<ul style="list-style-type: none"> • Project documents • Project staff • Project stakeholders 	<ul style="list-style-type: none"> • Desk review • Stakeholders' interviews • Project staff interviews
What are the key risks and barriers that remain to achieve the project objective and generate Global Environmental Benefits?	<ul style="list-style-type: none"> • Presence, assessment of, and preparation for expected risks, assumptions and impact drivers • Actions undertaken to address key assumptions and target impact drivers 	<ul style="list-style-type: none"> • Project documents • Project staff • Project stakeholders 	<ul style="list-style-type: none"> • Desk review • Stakeholders' interviews • Project staff interviews
Evaluation Criteria: Results			

Evaluation Questions	Indicators	Sources	Data Collection Method
Have the planned outputs been produced? Have they contributed to the project outcomes and objectives?	<ul style="list-style-type: none"> Level of project implementation progress relative to expected level at current stage of implementation Existence of logical linkages between project outputs and outcomes/impacts 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews
Are the anticipated outcomes likely to be achieved? Are the outcomes likely to contribute to the achievement of the project objective?	<ul style="list-style-type: none"> Existence of logical linkages between project outcomes and impacts 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews
Are impact level results likely to be achieved? Are these likely to be at the scale sufficient to be considered Global Environmental Benefits?	<ul style="list-style-type: none"> Environmental indicators Level of progress through the project's Theory of Change 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews
Evaluation Criteria: Sustainability			
To what extent are project results likely to be dependent on continued financial support? What is the likelihood that any required financial resources will be available to sustain the project results once the GEF assistance ends?	<ul style="list-style-type: none"> Financial requirements for maintenance of project benefits Level of expected financial resources available to support maintenance of project benefits Potential for additional financial resources to support maintenance of project benefits 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews
Do relevant stakeholders have or are likely to achieve an adequate level of "ownership" of results, to have the interest in ensuring that project benefits are maintained?	<ul style="list-style-type: none"> Level of initiative and engagement of relevant stakeholders in project activities and results 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews
Do relevant stakeholders have the necessary technical capacity to ensure that project benefits are maintained?	<ul style="list-style-type: none"> Level of technical capacity of relevant stakeholders relative to level required to sustain project benefits 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews
To what extent are the project results dependent on sociopolitical factors?	<ul style="list-style-type: none"> Existence of sociopolitical risks to project benefits 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews

Evaluation Questions	Indicators	Sources	Data Collection Method
To what extent are the project results dependent on issues relating to institutional frameworks and governance?	<ul style="list-style-type: none"> Existence of institutional and governance risks to project benefits 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews
Gender equality and women's empowerment			
How did the project contribute to gender equality and women's empowerment?	<ul style="list-style-type: none"> Existence of gender indicators/ plans Level of progress towards gender indicators in results framework 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews
In what ways did the project's gender results advance or contribute to the project's outcomes?	<ul style="list-style-type: none"> Existence of logical linkages between gender results and project outcomes and impacts 	<ul style="list-style-type: none"> Project documents Project staff Project stakeholders 	<ul style="list-style-type: none"> Desk review Field visits Stakeholders' interviews Project staff interviews

Annex-3: List of documents reviewed

S. No.	Documents reviewed
1	GEB PIF Document
2	GEB Original Project Document
3	Addendum of changes in GEB project document
4	GEB - LPAC
5	GEB Project Inception Report
6	Revised results framework of GEB
7	SESP GEB
8	TE Guidance for UNDP supported GEF financed Projects
9	PBS Environment Compendium 2015
10	PBS Environment Compendium 2020
11	GEB APR 2019, 2020 and 2021
12	GEB QPRs 2019, 2020 and 2021 (Q1 and 2)
13	GEB AWP 2019, 2020 and 2021
14	Report-lecture-FD KP-Peshawar
15	Report-lecture-FD Punjab
16	Report-lecture-Abbottabad
17	Report-lecture-Faisalabad University
18	Report-Seminar-FJWU-Rawalpindi
19	Report-Round Table Conference-UoP-Peshawar
20	Report-Round Table Conference-Balochistan
21	Report-seminar-EIMS Global Examples
22	Report- Utility of infographics for EIMS
23	Report-Analyzing utility of infographics
24	Report-Need for amendment in PCCA
25	Workshop Report Env Reporting and Monitoring
26	Report-training-Unfolding Environmental Activities
27	Webinar Report-World Habitat Day
28	Workshop Report-PCCA Act Amendment
29	Workshop report-Turbat-Gwadar
30	Workshop report-Sustainable Intogen Management
31	Workshop report-world environment day 2021
32	Report-visit to CPEC Project site
33	Report-visit to NCPC
34	Report-visit to PITB
35	Attendance sheet events
36	Letter from GEB to PPPI for partnership in capacity building activities
37	Participants feedback survey regarding GEB events (2019, 2020 and 2021)
38	Lectures reports
39	Report-Seminar Peshawar University (5 June 2021)
40	Report-Seminar Peshawar University (18 Nov 2021)
41	Report-Seminar Understanding Environmental Impact Assessment (EIA)
42	Report Seminar Air Pollution – Issues and Its Control

43	GEB Approved Budget Revision
44	HACT Audit Report - December 2020
45	Statement of Assets and Equipment
46	Notifications of GEB NPDs
47	LOA University of Peshawar & GEB
48	Responses to social and environmental risks
49	TOR_GLOF & GEB collaboration for EIMS
50	PSC meetings minutes 2019, 2020 and 2021
51	Capacity development scorecards (2019, 2020)
52	UNDP CO team Field Monitoring Visit Report-GEB_11Sep2020
53	UNDP Spot Check Report - GGEB 2021

Annex-4: Progress/ achievements of indicators regarding objectives and outcomes

Indicator	End project targets	Status (Dec 2021)	Findings / observations
Project Objective: Removing the barriers to environmental information management and mainstreaming global environment concerns into economic decision making.			
1. An Environmental Information Management System for Pakistan developed under the EIMS project is functioning effectively and sustainably	1.1. EIMS for Pakistan fully operational;	1.1 Technical, institutional, and IT frameworks for EIMS were developed. Consultant for development of the web portal engaged. The EIMS is planned to be operational by end of the project in collaboration with Pak-EPA	Verified. Reports shared. IT consultant interviewed. <ul style="list-style-type: none"> • Pak EPAs capacity is low. • Server is old and outdated. • Limited staff. Only one IT person is available. • In premises server is an outdated concept. Cloud based systems are increasingly used.
	1.2. Environmental reporting (variables & indicators) framework approved & adopted.	1.2: Study conducted and list of indicators and variables defined.	Verified-Report on “Identification and finalization of indicators for EIMS” shared. Final approval of the framework yet to be done.
	1.3. Three annual State of environment (SOE) reports each for Pakistan, Punjab and KP published	1.3: Three SOE report (one each for ICT, Punjab and KP are in progress and expected to be complete by Feb 2022	The project management has changed its strategy. The existing draft SOE report of the Pak EPA is to be updated and published. For Punjab and KP only “guidelines for SOE Reporting” have been developed and shared with the Punjab P&D Board and KP EPA. (Verified during interviews with the focal points. Coordination with Punjab EPA did not seem to be effective.)
2. Enhanced capacities for integrating environment in economic development by the Government of Pakistan as well	2.1. Planning and development functions in the government of Pakistan, Punjab and KP have enhanced access to environmental knowledge and capacity;	2.1 Engaged officials from P&D Departments in all capacity building activities. Provided technical backstopping to P&D departments for	Verified. List of events, reports and attendance sheets verified. Beneficiaries also interviewed.

Indicator	End project targets	Status (Dec 2021)	Findings / observations
as the provinces of Punjab and KP.		the production of SOE reports. Shared technical studies with P&D.	
	2.2. About 400 Officers or more from Ministries or departments dealing with economic development, the federal and provincial level in Punjab and KP have basic training and exposure to the essentials of environment and development;	2.2: Total 34 events (12 lectures, 18 Seminars/ workshops/ trainings/ RTCs, 4 on-sites visits	Verified. Out of 45 planned workshops/ seminars only 18 were conducted. However, the total number of 400 officers was well achieved. A total of 1377 people participated (40% females/ 60% males). Beneficiaries were interviewed. Overall effectiveness was ranked as high.
	2.3. One or more professional networks of environmental experts is in place and accessible to P&D Division and P&D departments in Punjab and KP to help in environmental reviews of development projects;	2.3: Two professional networks (one at FJWU and another at DES UoP) established.	LOA signed only with the DES of the UoP. LoA with FJWU could not be signed.
3. A Market mechanism for sourcing and supplying environmental information.	3.1 A market-based approach to sustainability in capacity building for environment is successfully pilot tested for replication and scaling up later.	3.1 Two professional networks (one at FJWU and another at DES UoP) established. 3.2 Research agenda developed and implemented by the DES of UoP. 3.3 Capacity building activities have also been carried out by following change agent methodology.	The capacity building events were supposed to be organized through NIPA. This was not done as proposed in the addendum/ revised PRF.

Indicator	End project targets	Status (Dec 2021)	Findings / observations
4. Public Opinion is better informed and more supportive of environmental protection and sustainability	4.1 People across the different economic and demographic strata in Pakistan have a better understanding of the environment and of the need to protect and use it sustainably.	4.1 One press briefing and two on-site visits organized for media representatives. 4.2 Developed knowledge products related to EIMS and environment. (i) Brochure (ii) GEB-Update (iii) Compiled Reports (iv) Fact Sheets (v) Awareness Raising Material and (vi) documentary/dramas.	Partially achieved. Two animated videos and factsheets shared-no documentaries shared. These are in the process of review. Dissemination is not done yet
5. Enhanced and sustained political support to mainstream sustainability in economic development.	5.1. An increasing number of economic development projects benefit from adequate and competent environmental impact assessment that are influential in shaping the design and course of such projects for greater sustainability.	5.1. 02 onsite briefings for political fraternity have been arranged thus to sensitize with green economic development and upraise them on the latest information on environmental impact assessments	Partially achieved-still in progress. IRs, IEEs and EIAs not impacted yet. The KP EPA informed that they were already revising and updating the EIAs procedure. MoPD&R's guidelines for project development and implementation have improved tools and recommendations for environmental consideration in development projects.
Outcome-1: Availability of Consistent and Reliable Environmental Data			

Indicator	End project targets	Status (Dec 2021)	Findings / observations
1. Availability of adequate, consistent, reliable and up-to-date data on Pakistan's Environment	1.1 A Unified Collection, Storage and Access System for Primary Data managed by Pakistan Bureau of Statistics	<p>Studies conducted:</p> <ul style="list-style-type: none"> Review the current system of generation, collection and compilation of environmental information in different selected Pakistani departments Need assessment for the development and access of environmental information system for KP. Review various EIMSs across the globe for exploring best practices. Development of environmental data repository for ICT, Punjab and KP Mapping of stakeholders/departments involved in collection and generation of environmental data and information for ICT, Punjab and KP. 	<p>Verified-Studies conducted. Overall, the reports are OK. Some quality issue found in tow reports:</p> <ul style="list-style-type: none"> The study regarding “review of current system of generation, collection and compilation of environmental information in different selected Pakistani departments” has some old and outdated information. The data repository report for KP reflects data of GB.
2. Quality and reliability of environment data	2.1 Quality assurance tools are developed and pilot tested in 4 agencies gathering primary environment data each in Punjab and KP.	Designed and created an innovative Dashboard for selected projects of Ministry of Climate Change (MOCC) for summarizing and reporting their data, which would ultimately allow users to make decisions based on the reliable and up-to-date information. Identified and finalized environmental indicators for federal, Punjab and KP to support EIMS.	<p>Verified-reports shared.</p> <p>As per ProDoc the target is the development, pilot testing of a set of data quality assurance protocols for selected 4 entities, 2 each in Punjab and KP, responsible for gathering primary data. The above-mentioned activities are the background steps, however specific QC/QA protocols need to be developed. The project team could not share any such QC/QA</p>

Indicator	End project targets	Status (Dec 2021)	Findings / observations
			protocols/ tools developed under the project.
3. A compendium of Pakistan's environmental statistics, with enhanced contents, regularly published.	3.1 The Compendium of Environmental Statistics for Pakistan are published regularly every year with improved contents matching the country's environmental reporting requirements	Study conducted regarding review of the existing protocols adopted by various selected stakeholders/ departments for gathering primary environmental data/mapping exercise of environment sector activities and projects. Extended support to PBS for publication of compendium 2020.	Verified. Report shared. Outdated information found in the report. A consultation process consisting of three Round Table Conferences one each at federal, Punjab and KPK level for identification and removing of gaps in the existing protocols and then finalization of those gaps, was not properly followed. The review paper was supposed to be discussed further in RTCs. Environmental compendium 2020 has no significant changes as compared with the 2015 one.
Outcome 2: A Coordinated and Robust Environmental Information Management System			
1. A reliably functioning web (EMIS) portal hosting a multitude of data basis from participating organizations	National EMIS for Pakistan fully functional in year-1 and reliably operating during the course of the project and afterwards.	<ul style="list-style-type: none"> Conducted study on designing technical and institutional framework for the EMIS. Conducted study on designing IT framework for the EMIS Operationalize & Inaugurate Environmental Management Information System (EMIS)-IN PROGRESS 	Verified. Studies on technical and institutional frameworks for the EMIS and IT framework shared. IT consultant interviewed

Indicator	End project targets	Status (Dec 2021)	Findings / observations
2. Sustained participation and continuous updating of the respective environmental databases by the respective participating organizations in National EIMS	An effective management and coordination structure securing sustained participation and contributions of the existing EIMS partner organizations is established in year-1 and sustainably operated thereafter, making it more inclusive and broader over time.	<ul style="list-style-type: none"> Studies conducted to identify key policy shifts or major developments that are required to integrate environment and development in Punjab, KPK and ICT Focal persons from PBS, EPAs, P&Ds, FDs, academia nominated and engaged. Two professional networks established in FJWU and DES of UoP. Interns engaged 	<ul style="list-style-type: none"> Studies verified-reports shared Verified. Focal points nominated. Meetings held with focal points/ their reps. They participated in the events and the PSC meetings. Special data generation, data collection, sharing meetings not held. Verified- partially achieved. Only LOA with DES UoP. Verified-list of interns shared, interns contacted and verified-4 females and 2 males. Inconsistency in implementation approach. Frequent changes of EMIS hosting organization.
3. Pakistan's Annual State of Environment Report(s)	Pakistan's First State of Environment Report published in year-1 and, one more annual report produced thereafter.	<ul style="list-style-type: none"> Collaboration with Pak-EPA, Ministry of Climate Change established for revision and updating of the 2016 draft SoE report. Planned Developed liaison with relevant departments in provinces (P&D Board-Punjab, and EPA-KP) for development of the SOE reports. Developed and shared a template for environmental profile / State of Environment report for Punjab and KP 	<ul style="list-style-type: none"> Verified-report on "Guidelines for developing provincial SoE Report" shared-Quality of the report is good. Likelihood of ICT level SOE report are moderate while SOE reports of Punjab and KP are very low.

Indicator	End project targets	Status (Dec 2021)	Findings / observations
4. Consistency and complementarities in reporting environmental information by the Federal Government and the provinces.	Bench marking of Environmental Statistics of Pakistan with the EIMS/NEIMS Identified Environmental Data Requirement	<ul style="list-style-type: none"> Developed a template for environmental profile / State of Environment report for Punjab and KP. 	
5. Enhanced and improved country reporting against the three multilateral environmental agreements of CBD, UNFCCC and CCD.	A total of three Country Reports under CBD, UNFCCC and UNCCD due during the project are produced in time with enhanced content and quality.	<ul style="list-style-type: none"> Prepared 04 background papers related to UNCBD, UNFCCC, UNCCD and NDCs revision. (Discussed the work carried out so far, reviewed the reporting done by Pakistan, identified gaps and frailties in the reporting and suggested way forward for its improvement.) Support Ministry of Climate Change (MoCC) for Nationally Determined Contributions (NDCs) Revision. 	<ul style="list-style-type: none"> Could not be verified. Report was not shared. The background papers will be shared with the focal points in the MoCC and the work will be complete. Coordination issue found with the focal points at MoCC.
6. Synergy between environmental research, reporting and practice.	Institute and pilot test need-based research collaboration between Ministry of climate change including directorate general of environment and Pak EPA, Provincial P&Ds together with EPAs, and two universities, one each in Punjab and KP, involving a total of 12 short research assignments during the project period	<ul style="list-style-type: none"> LOA was signed between the University of Peshawar (UOP) and MoCC through GEB project. Developed a comprehensive "research agenda" to be executed under the grant provided. Research studies conducted by the DES UoP Engaged students interns in GEB project. 	Verified. Copy of LoA with DES UoP shared. Copy of research topics shared. Research reports shared. Grant support confirmed by the Chairman DES UoP. Confirmed engagement of 06 student interns-4 females and 2 males. Research studies by a second university (FJUW) were not conducted

Indicator	End project targets	Status (Dec 2021)	Findings / observations
Outcome 3: Enhanced commitment and capacity for sustainable development planning and legislation			
1. Understanding of environment issues among planners for economic development in public sector	A core of 400 officers in economic development ministries and departments are exposed to the essentials of environment, through 90 workshops or seminars at respective ministries or departments and 12 guest-lectures in relevant training institutions.	<ul style="list-style-type: none"> Organized 12 lectures, 18 workshops/ seminars/ webinars/ trainings, and two RTCs 	<ul style="list-style-type: none"> Verified-Reports shared. Beneficiaries also interviewed- overall satisfaction level ranges from moderate to high As per ProDoc/ Addendum the RTC were supposed to discuss the identification and removing of gaps in the existing protocols instead of sensitization Implementation approach as proposed in the addendum was not followed; NIPA was not engaged in the lectures. <p>A total of 18 workshops/ seminars/ trainings/ webinars could be conducted against the target of 45 workshops or seminars</p>
2. Access to environmental expertise and competence required for informed economic decision making	Develop, design and pilot test an alternate market-based approach to capacity development for environment.	<ul style="list-style-type: none"> Universities were engaged for policy research Government officials were engaged for capacity enhancement Policy analysis was conducted Developed a “research agenda” in coordination with Ministry of Climate Change, and implemented by the DES of UoP 	<ul style="list-style-type: none"> Verified. LoA with UoP shared. Research plan and research reports of UoP shared FJWU was not engaged in research. List of experts

Indicator	End project targets	Status (Dec 2021)	Findings / observations
3.Public opinion and support for environment protection and friendly development	<p>(a) Two popular TV drama serials to Increase the environmental understanding and support of masses, reachable by popular TV, and thus stimulate popular demand for environment protection and sustainable development.</p> <p>(b) Likewise target opinion leaders in media (press and electronic) through 12 site visits to high profile projects.</p>	<ul style="list-style-type: none"> Organized TWO visits of Media representatives/selected stakeholders Developed knowledge products related to EIMS and environment (Drafted brochure, newspaper articles, factsheets and reports as knowledge products) Two documentaries/dramas were prepared and are under approval process. Public opinion survey is planned in 2022. 	<ul style="list-style-type: none"> Partially achieved. Two animated videos and factsheets shared. No documentaries shared. These are in the process of review. Dissemination is not done yet. The target of TV dramas was changed with documentaries. Target of 12 site visits could not be achieved.
4. Political Commitment and Support for protecting environment and mainstreaming sustainability in economic development	<p>(a) Expose the existing standing committees on environment in different houses of public representatives, create new ones where needed though a total of 24 briefing sessions.</p> <p>(b) Engage a broader spectrum of politicians both at federal and provincial level by organizing site visits to high profile development projects for discussions on their economic and environmental promises and implication. About 9 such visits are envisaged.</p> <p>(c) Increase the number of development projects whose design is positively shaped by environmental considerations.</p> <p>(d) Engaging the current leadership to contribute to the project objectives, specifically related to environment information management.</p>	<ul style="list-style-type: none"> Two press briefings, and one onsite visit organized at CPEC site 	<ul style="list-style-type: none"> Verified. Reports shared. Only 02 onsite briefing could be organized against the total target of 24. This was mainly due to the Covid-19 pandemic. Information on the increased number of development project with enhanced environmental considerations, could not be provided.

Annex-4: Status of GGEB commitments till Dec 2021 (Co-financing table)

Co-financing (type/source)	UNDP financing (US\$)		Government (US\$)		Partner agencies (US\$)		Total (US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants	217,700	185,386	636,350	0			854,050	185,386
Loans/Concessions	-	-	-	-	-	-	-	-
In-kind support	-	-	86,000	89,926	-	-	86,000	89,926
Other	-	-	-	-	-	-	-	-
Totals							940,050	275,312

Note: The UNDP's balance co-financing is planned till March 2022

Annex-5: Confirmed Sources of Co-Financing at TE Stage

Sources of Co-Financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount (US\$)
GEF Agency	UNDP	Grant	Recurrent cost	185,386
Recipient Country Gov't	Federal and provincial gov'ts	Grant	Investment mobilized	0
		In-Kind	Recurrent cost	89,926
Sub-total (Grant)				185,386
Sub-total (in-kind)				89,926
Total co-financing				275,312

Note: The UNDP's balance co-financing is planned till March 2022. The Gov't's in-kind co-financing will increase till March 2022 (project's closing date)

Annex-6: Details of the events conducted

Lectures						
Event Title	Event Type	Date	Collaboration	Total participants	Male participants	Female Participants
Environmental information & management: addressing key issues & way forward for Pakistan	Lecture	26-Mar-19	Forestry, Environment & Wildlife Department, Peshawar	27	21	6
EMIS: addressing key issues & way forward for Pakistan	Lecture	18-Apr-19	Forest Department Punjab	31	25	6
EIMS: Addressing Key Issues & Way Forward for Pakistan	Lecture	06-Aug-19	Forest Department KP	52	39	13
Environmental Information & Management - The Case of Punjab, Pakistan	Lecture	28-Nov-19	University of Agriculture Faisalabad	116	69	47
Air Pollution and Role of Trees in Air Pollution Abatement	Lecture	06-Jul-21	University of Peshawar	25	17	8
Occupational Health and Dust Explosion	Lecture	19-Jul-21	University of Peshawar	24	16	8
Solid Waste Management and Its Impacts in Pakistan	Lecture	02-Sep-21	University of Peshawar	28	19	9
Use of pesticides on Agriculture crops and its impacts on human health and environment	Lecture	09-Sep-21	University of Peshawar	27	21	6
Racing to Zero: In Pursuit of Zero Waste	Lecture	04-Oct-21	University of Peshawar	20	14	6
Climate Change in light of Science & Islam	Lecture	15-Oct-21	University of Peshawar	23	19	4
Environmental pollution and management	Lecture	26-Oct-21	University of Peshawar	20	16	4
Climate Change Impacts on Health and Livelihoods: Pakistan Assessment	Lecture	03-Nov-21	University of Peshawar	21	17	4
Subtotal				414	293	121

Seminars /Workshops/RTC/Trainings						
Event Title	Event Type	Date	Collaboration	Total participants	Male participants	Female Participants
Global Perspectives and Way Forward for Environmental Information & Management in Pakistan	Seminar	23-Apr-19	FJWU	104	12	92
Environmental Information & Management - Global Examples & Lessons for Pakistan	Seminar	18-Sep-19	Engineering & Technology, University Road, Karachi	107	89	18
A Call to Create a Good Relationship with Nature	Seminar	05-Jun-21	University of Peshawar	26	12	14
Understanding Environmental Impact Assessment (EIA) -	Seminar	22-Jun-21	University of Peshawar	31	15	16
Wetlands and its importance	Seminar	18-Nov-21	University of Peshawar	35	15	20
Air Pollution – Issues and Its Control	Seminar	30-Nov-21	University of Peshawar	28	12	16
Environmental Information & Management: Global Perspectives & Way Forward for Khyber Pakhtunkhwa	RTC	17-Jun-19	Environmental Protection Agency, Peshawar, KPK	24	17	7
Environmental Information Management system and the World	RTC	21-Nov-19	BUIITEMS, Quetta	34	29	5
Environmental Monitoring & Reporting -The Case of Pakistan	Workshop	28-Sep-20	NCPC	23	16	7
Celebration of World Habitat Day: Housing for all: A better Urban Future	Workshop	05-Oct-20	United Nations Human Settlement Programme (UN Habitat)	111	50	61
Proposed Amendments in Pakistan Climate Change Act (PCCA)-2017	Workshop	09-Mar-21	Ministry of Climate Change	15	12	3
Environmental Information & Management-The Case of Gwadar-Balochistan	Workshop	18-Mar-21	University of Turbat-Gwadar Campus	20	15	5

Exploring the Funding Opportunities for Effective Ecosystem Restoration in Pakistan'	Workshop	01-Jun-21	Lasbela University-Balochistan	44	17	27
World Environment Day-Sustainable Nitrogen Management for Ecosystem Restoration	Workshop	04-Jun-21	University of Agriculture Faisalabad	100	60	40
COP 26: What shall Pakistan Look For	Workshop	16-Oct-21	GGEB	17	12	5
Exploring the role of Infographics for EIMS	Training	25-Jun-20	University of Peshawar	50	30	20
Analysing Utility of Infographics for EIMS	Training	30th June 2020	International Islamic University Islamabad	58	26	32
Unfolding Environmental Activities & Determining Need for Future Course of Action	Training	30-Sep-20	GGEB	55	35	20
Subtotal				882	474	408
Onsite Visit/Press Briefing						
Event Title	Event Type	Date	Collaboration	Total participants	Male participants	Female Participants
Exploring the Role of Media for Environmental Information Management System (EIMS)	Onsite Visit	30-Apr-19	Morgah Biodiversity - Rawalpindi	18	11	7
EIMS & IT – Exploring the Role of Media and other stakeholder	Onsite Visit	26-Sep-19	Punjab Information Technology Board,	18	14	4
The developmental activities under CPEC in Gwadar	Onsite Visit	18-Mar-21	GGEB	15	12	3

Pakistan to Host World Environment Day (WED) & Launch of the UN decade on Ecosystem Restoration	Press Briefing	01-Mar-21	GGEB-Mocc	30	16	14
Subtotal				81	53	28
Total (all events)				1377	820	557

Annex-7: Master interview guide and summary of findings

Evaluation questions	Summary of results
Project formulation: (Relevance, design, main challenges)	
Was there adequate participation of stakeholders and beneficiaries in the project formulation?	All the respondents acknowledged the participation stakeholders
Were you involved in project formulation and how?	One out of the 18 respondents interviewed confirmed that he himself participated. Four out of the 18 respondents confirmed that representatives from their organizations participated.
Has the project strategy (comprising of improved environmental data generation, development and piloting of EIMS, and reporting, coordination, technical support, capacity building) been effective? How could it have been improved?	16 of the eighteen respondents agreed that the project strategy was effective. The respondents proposed that further improvement could have been done by refinement and bringing more clarity in the capacity building component of the project, and including other provinces in the project.
Do you have any PC-1 as required for other NIM projects? Is there any difference in the ProDoc and PC-1? How much time did it take to develop and get it approved by the concerned authorities?	The question was mainly asked from the project team (four respondents). All of them said that the project has a PC-1 however, they did not have copy of the PC-1. The PC-1 took almost two years to develop and get it approved.
Did you experience any problems or gaps in the project design or approach that affected project implementation?	The project design has low budget, limited staff and lack of clarity in the capacity and awareness raising component.
Project implementation (management structure, coordination, planning, monitoring, challenges, lessons)	
How effective and efficient was the Project Structure in facilitating project coordination, communications and implementation at national, and provincial levels?	<ul style="list-style-type: none"> Limited staff at the PMU (only NPC, and APO) Project coordination provided. As a strong point. However, the number was more and had to be reduced in the inception phase.

Evaluation questions	Summary of results
Has annual work planning and budgeting been effective? Have actual disbursements been in line with annual budgets, work plans and schedules? Were there any delays in administrative processes?	<ul style="list-style-type: none"> • The AWP's 2019, 2020 and 2021 were approved on 27 Dec 2018, 11 February 2020 and 16 February 2021. The first was on time while the other were slightly delayed. • The actual disbursements of GEF and UNDP were more or less according to the annual plans. Some minor changes occurred. • Delays in disbursement of funds due to audit observations and change of NPDs.
Have the project management bodies and partners been sufficiently active in guiding and responding to issues?	<ul style="list-style-type: none"> • Yes. The PSC meetings held. The NPDs took keen interest. • PMU had active engagement with the MoCC and IPs. • Most of the IPs regularly participated in the PSC meetings and provided input. • Most of the IPs participated in the GGEB events. • UNDP CO team regularly interacted with the project team and also participated in the GGEB events
Have the project monitoring Indicators been effective and feasible for reporting on progress? Have they provided reliable measures of change?	<ul style="list-style-type: none"> • There were minor gaps especially due to delays and change of context. These were refined during the inception phase (changes made at output and activities' levels).
What have been the major challenges or issues in implementing the project? Are there lessons for design of future projects?	<ul style="list-style-type: none"> • Delays due to development and approval of PC-1 • Delays due hiring and re-hiring of the key project staff (the National Project Coordinator and Assistant Project Officer) • Lack of clarity issues related to lack of clarity under the GoP's Guidelines-2011 for implementation of NIM projects y under the GoP's Guidelines-2011 for implementation of NIM projects • The Covid-19 pandemic affecting activities like trainings, seminars and workshops • High turnover of GGEB focal points. Leading to issues in coordination. • Lessons for design of future projects; <ul style="list-style-type: none"> ○ Low and insufficient budget mainly affect the quality of project deliverables. In GGEB hiring of consultant especially for technical aspects needed more resources; ○ Sufficient technical staff need to be provided. Especially subject specialists such as IT experts and monitoring specialists. ○ Development and approval of PC-1 should start at the time of GEF PPG stage. ○ In addition to NPD there should be a technical person as focal point (head of a technical department) to fill the gap of frequent changes/ transfer of NPDs. ○ Similarly, the provincial PDs should also have one assistant focal person to fill the gap.
Project Results	
What aspects of the project have been most successful, and which least successful? Are there specific measures that have affected the potential for replication?	<ul style="list-style-type: none"> • Capacity building activities (Workshops, seminars, trainings, lectures) was the most successful aspect. • Partnerships with universities for research and trainings and workshops

Evaluation questions	Summary of results
	<ul style="list-style-type: none"> • Publication of SOE reports, and development and discrimination of awareness raising material (least successful aspects). No specific measures.
<p>Can you identify the Key Factors that have affected the project results – either positive or negative?</p>	<ul style="list-style-type: none"> • Key factors of positive effect: <ul style="list-style-type: none"> ○ Timely initiation of activities; ○ Good partnerships especially with universities; • Key factors of negative effects; <ul style="list-style-type: none"> ○ Delays in implementation; ○ Changes in strategy regarding independent implementation through component IPs; ○ Changes of lead coordinating body (Pak EPA Vs. Env and CC unit) ○ Limited staff at PMU;
<p>What has been the most apparent change in the following?</p> <ul style="list-style-type: none"> • EMIS (data generation and reporting, information products (SOE, Environmental Compendium etc.)) • Capacity regarding integration of environment and development, • Market mechanism for sourcing and supplying environmental information • Better informed and supportive public opinion regarding environmental protection and sustainability • Enhanced and sustained political support to mainstream sustainability in economic development. 	<ul style="list-style-type: none"> • Review of indicator conducted. Data generation and compilation templates developed, existing data compiled, coordination and liaison with PBS, Pak EPA, KP EPA and Punjab P&D for compendium and SOE reports conducted. • 1300 beneficiaries including 400 government officials trained, sensitized about EMIS, and mainstreaming environment in development; • Market mechanism for research and capacity building developed and pilot tested (DES of UoP and FJWU) • Briefings and on-site visits for media representatives and opinion leaders conducted.
<p>What is the most important learning or skill, if any, that you have acquired from the project trainings/ workshops/ seminars/ webinars or visits? What was the most effective method of these capacity building events (virtual seminars/ physical workshops/ site visits)?</p>	<ul style="list-style-type: none"> • Sensitized about the need of EMIS (reliable and consistent environmental data and information); • Collection and compilation of environmental data;
<p>How the EMIS and the information products are foreseen to use in decision making? How the EMIS will be maintained and improved? Is there a long-term vision for this?</p>	<ul style="list-style-type: none"> • Develop a communication strategy in consultation of all stakeholders; • Regular sharing of Env Data/ Statistics with the planning functionaries; • Formal endorsement and sharing of environmental screening checklist as a pre-requisite of project proposal development and approval process. • Host the EMIS web portal in the cloud-based server instead of in -premises server; • Create dedicated EMIS sections in Pak EPA, Provincial P&Ds and Provincial EPAs; • Establish federal and provincial EMIS coordination committees at Pak EPA, and Provincial EPAs or P&Ds;

Evaluation questions	Summary of results
Are there any expected results that have not been completely achieved or are not fully satisfactory?	<ul style="list-style-type: none"> • The EMIS is not yet finalized; only background work (institutional and IT frameworks, data compilation and digitalization) completed. Upgradation of server, development of the EMIS software and inauguration and operation of EMIS are still in process. • Publication of the three SoE reports is still to be done; • Finalization of the awareness material and dissemination not yet done.
Sustainability and replicability	
How the EMIS (data generation, reporting, storing, information generation and sharing) will be sustained? Is there any plan continuing the EMIS as per project design? In case of any incomplete task, how the remaining work will be completed?	<ul style="list-style-type: none"> • The EMIS will be sustained by hosting it at Pak EPA, which has the web server and IT person available. The Pak EPA has the PLAN project under the 10BTTP project, expected to provide human and financial resources; • The Punjab P&D has the PGDP programme which will provide equipment, human and financial resources for sustaining the EMIS; • The project has the plan to complete the abovementioned tasks under the project. The ones not possible during the project period will be handed over to Pak EPA and provincial IPs who will complete them under the planned projects. • UNDP CO to closely monitor the GGEB project during the remaining period.
Do you have any exit strategy to properly complete and handover the project results to the concerned organizations? (Please provide copy).	<ul style="list-style-type: none"> • No formal exit strategy developed by the project team. The steps provided under the project document will be implemented.
What actions could be considered to enhance sustainability?	<ul style="list-style-type: none"> • Letter from the MoCC to all IPs for adoption of the GGEB recommended framework for data collection, compilation and sharing; • Letter from the MoCC to PBS for adoption of the shortlisted themes and indicators regarding environmental data; • MoCC to ensure proactive coordination by Pak EPA regarding data collection, compilation and sharing for the EMIS; • Pak EPA and provincial P&Ds to established coordination bodies and ensure their regular meetings; • Pak EPA to develop a plan of action for further implementation and continuity of the EMIS; • The NPD to call a meeting of the IPs to discuss the plan under the ongoing projects. • Pak EPA to develop a separate PC-1 for the EMIS continuation and improvement under the PSDP.
Are there any plans for replicating project results? What steps have been taken so far?	<ul style="list-style-type: none"> • No formal steps taken so far. • Pak EPA and Punjab P&D have their new projects (PLAN and PGDP) to carry forward the GGEB work. • KP P&D and KP EPA have no specific plans.
Have you considered the project recommended actions for replication and improvement of project results?	<ul style="list-style-type: none"> • PBS does not want to increase the more organizations to generate, compile and support environmental data due to complications in coordination and getting data regularly.

Evaluation questions	Summary of results
<ul style="list-style-type: none"> Engaging more organizations to generate, compile and report environment data; Development of EIMS at provincial level as well; Replicating the same model in other provinces; 	<ul style="list-style-type: none"> P&D departments agree to increase the number of organizations. No actions taken yet as the EMIS work is not yet complete.
Have you documented the project lessons and how will you share these within the concerned organizations?	<ul style="list-style-type: none"> No documentation done. This is planned during the last two months of the project.
Impact	
<p>Is there any empirical evidence of project impact on?</p> <ul style="list-style-type: none"> Availability of authentic and updated environmental data and information? Integration of environment and development? Availability and use of market mechanism for sourcing and supplying environmental information? Public opinion regarding environmental protection and sustainability? Political support to mainstream sustainability in economic development? Are there any changes required in government policy or regulations to assist integration of environment and development? 	<ul style="list-style-type: none"> Availability of authentic and updated environmental data and information: The IPs and line departments showed their willingness and readiness to improve the data collection, compilation and sharing under the EMIS. The project has compiled the available data. As the EMIS is not yet finalized therefore formal sharing is not done. However, GGEB project has shared its study reports on its website which contain some of the data and information. Integration of environment and development: The MoPD&R has developed Manual for development projects 2021 that has environmental screening tools for the development and approval of developmental projects. Along with other efforts, the sensitization and capacity building efforts of the GGEB project might have contributed to this initiative. The present government has environment as one of the top priorities (BTTAP and 10BTTP projects, approval of provincial PAs acts etc.) Response from participants of GGEB events collected. More than 75% were in favour of environmental integration in development projects. Most of them also shared the recommendations of the workshops with their respective organizations.
Are there any lessons/ best practices of the project contributing to the impact of the project?	<ul style="list-style-type: none"> Lessons/ best practices; <ul style="list-style-type: none"> Engagement of universities in research and trainings Engagement of students/ interns in project studies Same IT expert firm should be engaged in the development of the IT framework as well as development of the software (the GGEB engaged two
Gender equality and women's empowerment	
<p>How the indicators regarding gender equality and women's empowerment proposed in the ProDoc were implemented?</p> <ul style="list-style-type: none"> Women involvement in the project inception and planning? Offering equal employment opportunities to women? Efforts to engage women in the project implementation? 	<ul style="list-style-type: none"> The consultation events regarding project formulation included women; For hiring the project staff women were also called for test and interviews; The Project Steering Committee (PSC) had female representation. Ms. Naheed Durrani Secretary MoCC remained as chair of the PSC, Ms. Farzana Altaf DG Pak EPA and Ms. Zainab Khatoon Chief Foreign Aid KP P&D were members of the PSC. Out of the four PMU staff one was female (25%). Out of the six interns engaged under the GGEB project four were females (67%). Out of the total 1300 participants/ beneficiaries of the GGEB events 557 were females (41%).

Evaluation questions	Summary of results
<ul style="list-style-type: none">• Ensure gender equity and integration in the environmental awareness, training and research activities of the project?	

Annex-8: TE Mission itinerary and persons interviewed

Revised dates (after discussion with the project team)	Office visited	Activity
27 Oct 2021	UNDP CO Islamabad (virtual meeting)	Kickoff Meeting with Sr. Programme Officer (ECCU) and Sr. Programme Associate (ECCU)
16 Nov 2021	GGEB Office Islamabad	First meeting with GGEB Project team
24 Nov 2021	GGEB Office Islamabad	Second meeting with the GGEB Project Team (Isb)
24 Nov 2021	DES UoP Peshawar	Meeting with the focal point in University of Peshawar
25 Nov 2021	KP P&D Department, Peshawar	Meeting with KP P&D Department (Peshawar)
01 Dec 2021	MoCC, Islamabad	Meeting with Head-Climate Finance Unit
02 Dec 2021	PBS Office Islamabad	Meeting with the focal point in Pakistan Bureau of Statistics (Isb)
07 Dec 2021	Virtual meeting	Meeting with Deputy Director KP EPA (Peshawar)
10 Dec 2021	Environment Section, Punjab P&D board, Lahore	Meeting with Punjab P&D Dept focal point (Lahore)
10 Dec 2021	DHA Lahore	Meeting with the Environment Consultant GGEB project
10 Dec 2021	Virtual meeting, Lahore	Meeting with the IT consultant GGEB Project
11 Dec 2021	Virtual meeting, Lahore	Meeting with Punjab Forest Department focal point (Lahore)
14 Dec 2021	Pak EPA office Islamabad	Meeting with DG Pak EPA
16 Dec 2021	Virtual meeting	Meeting with the KP Forest focal point (Peshawar)
16 Dec 2021	Virtual meeting	Meeting with consultant for review of PRF
22 Dec 2021	UNDP Islamabad, virtual meeting	Meeting with ARR (ECCU), Sr. Programme Officer (ECCU) and Sr. Programme Associate (ECCU)
12 Jan 2022	MoCC, Islamabad	Meeting with the GGEB NPD (MoCC, Isb)
19 Jan 2022	GGEB Office Islamabad	Final feedback meeting with NPC GGEB project

Annex-9: List of persons interviewed

S. No.	Name and designation
1	Aman Ullah Khan, ARR ECCU UNDP
2	Muhammad Sohail Khan, Sr. Programme Officer ECCU UNDP
3	Rana Naeem Programme Associate ECCU UNDP
4	Suleiman Waraiech National Project Director/ Joint Secretary MoCC
5	Dr. Saleem Inajua, National Project Coordinator GGEB Project
6	Numra Javed Project Assistant GGEB Project
7	Lufullah Khalid Assistatn Project Officer GGEB Project
8	Shahzad Zakir Admin and Finance Officer GGEB Project
9	Ahsan Kundi, Head CFU, MOCC
10	Irfan Tariq DG Env MoCC
11	Farzana Altaf Shah, DG Pak EPA
12	Haseeb Ur Rehman Statistical Officer PBD
13	Afsar Khan Deputy Director KP EPA
14	Dr, Nafees Chairman Department of Env Sciences UoP
15	Zainab Khatoon Chief Foreign Aid KP P&D
16	Habib Ur Rehman Assistant Chief Env Section Punjab P&D Board
17	Bilal Ahmad IT Consultant GGEB project
18	Mumtaz Hussain-Env Consultant GGEB project
19	Saleem Ullah, Consultant GGEB project
20	Abdul Muqet Khan Chief Conservator Punjab Forest Dept.
21	Malik Muhammad Sagheer Conservator KP Forest Dept

Annex-10: Revised project result framework/ logical framework

Overall Goal: Generating Global Environmental Benefits from Improved Decision Making in Pakistan				
Project Objective: Removing the barriers to environmental information management and mainstreaming global environment concerns into economic decision making.				
Indicators	Baseline	<i>Target</i> (end of project)	Sources of Verification[1]	Risks and Assumptions
1. An Environmental Information Management System for Pakistan developed under the EIMS ¹ project is functioning effectively and sustainably	A foundation laid under the EIMS project before exits but EIMS is not functional yet. Also, a framework of indicators and variables for environmental reporting is available but hasn't been approved and adopted; Likewise, State of the environment reports for Pakistan and different provinces have been drafted but not published yet ² .	1.1. EIMS for Pakistan fully operational; 1.2. Environmental reporting (variables & indicators) framework approved & adopted. 1.3. Three annual State of environment (SOE) reports each for Pakistan, Punjab and KP published ³ .	1.1. Internet - continued and reliable access to EIMS 1.2. Government Notification approving the environmental reporting framework; 1.3. Published reports of state of environment in Pakistan, Punjab and KP; 1.4. Published SOE reports increasingly reflect the adopted environmental reporting framework.	It is assumed that most of the spade work has already been done, and that it wouldn't take much of the project's resources to have the EIMS pending outputs reach fruition ⁴ . The approval and adoption of the environmental reporting framework will require an understanding and agreement among stakeholders, notably, with the provinces to follow the framework consistently.

¹ NEIMS is to be corrected as NEIMS as the project was titled as National Environmental Information Management System

² ² The incomplete outputs of NEIMS was assumed to be completed under the GEODATA project under the Federal EPA, nevertheless during the period GEODATA didn't materialize as planned and thus dependence on GEODATA may not be realistic. Thus the all the project outputs should be deemed to focus on the set up as enshrined in the revised document.

³ This is due to the devolution on one hand that the project is focusing, beside federal Government, on the two provinces as well. On the other hand the project mentions of two SOE reports that cannot be for three different entities.

<p>2. Enhanced capacities for integrating environment in economic development by the Government of Pakistan as well as the provinces of Punjab and KP.</p>	<p>Much of the laws, policies and guidelines for integrating environmental consideration in development projects exists but capacities to implement they are patchy, mostly residing in ministries and departments directly related to environment. Even here, the needs far exceed the capacities, and the environmental capacities in the ministries and departments dealing with economic development are almost non-existent.</p>	<p>2.1. Planning and development functions in the government of Pakistan, Punjab and KP have enhanced access to environmental knowledge and capacity; 2.2. About 400 Officers or more from Ministries or departments dealing with economic development, the federal and provincial level in Punjab and KP have basic training and exposure to the essentials of environment and development; 2.4. One or more professional networks of environmental experts is in place and accessible to P&D Division and P&D departments in Punjab and KP to help in environmental reviews of development projects;</p>	<p>2.1. Project Progress Reports 2.2. Interviews with key participating organizations 2.3. Feedback from a sample of target beneficiaries. 2.4. Records of participants in different training workshops and sessions.</p>	<p>There are no major risks as such but it is assumed that the target organizations and their staff will be interested to participate in the environmental training and exposure programs. It is also assumed that the governments will be interested and supportive of trying the alternative approach of capacity building through professional networks.</p>
<p>3. A Market mechanism for sourcing and supplying environmental information.</p>	<p>There is little, if at all any, market-based approach to sustainability in capacity building for environment.</p>	<p>A market-based approach to sustainability in capacity building for environment is successfully pilot tested for replication and scaling up later.</p>	<p>1. Project reports 2. Verification from participants of experts' network making a part of the market-based approach 3. MOUs/agreements between entities and supplying information.</p>	<p>It is assumed there are enough willing and able participating entities for the market-based approach to be initiated, tested and established⁵.</p>

⁵ The federal EPA and other key stakeholders during the inception workshop didn't agree that under this project within the resources they can implement an entirely new approach within any previous baseline and foundation. They mentioned that the market based approach will need another larger and focused initiative. This project is already thinly spread and this approach may further reduce its effectiveness or the opportunity cost for other components will be out of proportion.

4. Public Opinion is better informed and more supportive of environmental protection and sustainability	Most people are currently little aware of the environment issues and must less about the need to integrate environment and development.	People across the different economic and demographic strata in Pakistan have a better understanding of the environment and of the need to protect and use it sustainably.	1. Successful telecast of two popular TV drama serials; 2. A public opinion baseline survey; 3. A repeat public opinion poll at the end of the project.	No Major risks. The popular TV channels, it is believed, would want to engage in the project implementation.
5. Enhanced and sustained political support to mainstream sustainability in economic development.	Most of the economic development projects miss on adequate assessments of their environmental impacts as well on the reviews of these impacts during the processes of project approval.	An increasing number of economic development projects benefit from adequate and competent environmental impact assessment that are influential in shaping the design and course of such projects for greater sustainability.	1. Records of Pak EPA, Punjab EPA and KP EPA for IIEs and EIAs; 2. Records of Government of Pakistan P&D Division and P&D Departments in Punjab and KP of environmental reviews of economic development projects; 3. Records of participating economic ministries and departments of the environmental research and analysis of future policies, laws and plans and the influence of such analysis on eventual decisions.	The achievement of this indicator is contingent on the willingness and support of the participating government ministries, departments and NGO ⁶ s to try the alternate market-based approaches. Most essential is an effective engagement of the members of parliament and provincial assemblies.
Outcome 1. Availability of Consistent and Reliable Environmental Data				
Indicators	Baseline	<u>Target</u> (end of project)	<u>Sources of Verification</u> [1]	Risks and Assumptions

⁶ Currently the situation for the NGOs is not very supportive in the country, they are facing the issue of access to sites due to Government's restriction as well as funding constraints from their donors. Thus NGOs can't be expected to play any vital role in this project.

1. Availability of adequate, consistent, reliable and up-to-date data on Pakistan's Environment	<p>Environment data in Pakistan is fragmented. Different organizations tend to generate and use their respective data that is seldom widely shared. Relatively more comprehensive data is gathered by Pakistan Bureau of Statistics, but it is incomplete. There are also often questions as to the reliability of data.</p> <p>At provincial level in both Punjab and KP the Bureaus of Statistics serve as attached departments of the provincial P&D departments with the mandate of collection, consolidation, processing, analysis, publication and dissemination of statistics.</p>	A Unified Collection, Storage and Access System for Primary Data managed by Pakistan Bureau of Statistics	<p>1. Pakistan Bureau of Statistics</p> <p>2. Feedback from Ministry of climate change (directorate general of environment) and other stakeholders</p> <p>3. Revised and improved/new protocols for gathering and reporting environmental data</p> <p>4. Component reports of the agencies gathering and reporting primary data to Bureau of Statistics.</p>	<p>1. An agreement between Climate Change Division,⁷ and Pakistan Bureau of Statistics on environment data gathering and reporting reforms/improvements.</p> <p>2. An agreement between Bureau of Statistics, its counterpart in Provinces, and the agencies gathering primary data</p>
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⁷ The agreement will be reached between Pakistan Bureau of Statistics and Ministry of Climate Change, with Directorate General of Environment within the Ministry as the focal office rather than the EPA. The EPA was initially tasked due to Geomatic project, nevertheless the overall environmental information such including the State of Environment Reports, etc. are coordinated through DG environment rather than EPA, though is one of the key contributors in terms of information.

2. Quality and reliability of environment data	The quality and reliability of data, including for environment, in Pakistan is often questioned. Sometimes it is a question of perception stemming from variability introduced by variation in sourcing, other times the concern is real. Limited work, if much, has been done in the past to address the issue of quality and reliability of environment data	Quality assurance tools are developed and pilot tested in 4 agencies gathering primary environment data each in Punjab and KP.	1. Project progress reports; 2. Review of data reported by the participating agencies	An agreement and effective collaboration between provincial EPAs responsible for coordinating the related output and the target data gathering agencies. These agencies will need to have the motivation to participate in what may otherwise appear marginal to their mainstream operation
3. A compendium of Pakistan's environmental statistics, with enhanced contents, regularly published.	A compendium of the country's environmental statistics is published by Pakistan Bureau of Statistics, periodically; The last one was published in 2011. Its contents however need enhancement to match the country's environmental reporting requirements.	The Compendium of Environmental Statistics for Pakistan are published regularly every year with improved contents matching the country's environmental reporting requirements	1. Publishing record of Pakistan Bureau of Statistics 2. Feedback from Directorate General of Environment, Ministry of Environment and other stakeholders on content improvement; 3. Comparison of the 2010, 2014 compendiums' contents with those published in future.	The Climate Change and Division, Bureau of Statistics, agree on the enhanced contents and process improvement as well as on regular annual publication of the compendium.
<p>Output 1.1: A Unified Collection, Storage and Access System for Primary Data</p> <p>Output 1.2: An Established List of Priorities for Data Gathering and Reporting</p> <p>Output 1.3: A Report of Bench Marking of Environmental Statistics of Pakistan with Environmental Data Requirement⁸</p> <p>Output 1.4: An Agreement between the Climate Change Division (CCD) and Pakistan Bureau of Statistics (PBS)</p> <p>Output 1.5: Reformed Data Collection Tools and Approaches and clarified the mandate for residual data collection⁹</p> <p>Output 1.6: Environment Statistics of Pakistan</p> <p>Output 1.7: Protocols of Quality Assurance of Environment Data</p>				

⁸ The output is rephrased as the environmental data requirements will be determined through the relevant departments afresh rather than as determined by NEIMS as the situation on the ground has substantially changed due to devolution and other changes in the institutions.

⁹ Output 1.5 and 1.7 are clubbed together and now both are merged. The target under 1.5 will now include clarifying or freshly establishing the mandate for collecting left over essential data that Bureau of Statistics is unable to internalize in their system.

Outcome 2: A Coordinated and Robust Environmental Information Management System				
Indicators	Baseline	<u>Target</u> (end of project)	<u>Sources of Verification</u> [1]	Risks and Assumptions
1. A reliably functioning web (EIMS) portal hosting a multitude of data basis from participating organizations	The spade work for it has already been done. The portal is partially operating with some data hosed in COMSATS under mandate from Pak EPA. The mandate of Pak EPA is now limited to the jurisdiction of the Capital, rather than coordinating at National level.	National EIMS for Pakistan fully functional in year-1 and reliably operating during the course of the project and afterwards.	Internet/National EIMS Portal	An effective collaboration between the completed EIMSNEIMS project, its successor Geomatic Centre in EPA and this project. ¹⁰
2. Sustained participation and continuous updating of the respective environmental databases by the respective participating organizations in National EIMS	The different environmental organization generating and holding environmental information in the country were brought together under the EIMS project. However, the overall management structure for sustaining a functioning EIMS remained to be established	An effective management and coordination structure securing sustained participation and contributions of the existing EIMS partner organizations is established in year-1 and sustainably operated thereafter, making it more inclusive and broader over time.	1. Ministry of climate change, including and its attached department of Pak EPA Records 2. Records of the meetings and conferences; 3. Review of the content of EIMS portal at the beginning and end of the project, and periodically in between.	Pak EPA and the organization it outsources the EIMS Coordination to have the interest and ability to effectuate sustain and grow the Pakistan EIMS ¹¹ . Also, it is assumed the participating organizations have the motivation and incentive to continuously update their information and databases contributed to and through the EIMS.

¹⁰ The Geomatic center is still not in the position to absorb this initiative

¹¹ Pak EPA is generating information through various sources including Geomatic project, nevertheless in itself a project, Geomatic also faces the sustainability challenges, thus the Ministry of climate change through its directorate general of environment who housed the NEIMS project as well, will serve as the focal institution for housing the project infrastructure and the delivery of major outputs such as state of environment report, partnership with PBS, etc. Federal EPA will be among the major contributors of environmental information but GEB's infrastructure can't be a subsidiary to Geomatic project. Nevertheless the current phase of Geomatic project is ending on 31st December 2018, and the successor, if any, will not have the federation serving aspects due to devolution of its functions to provinces, and the jurisdiction of Pak EPA is now limited to the Islamabad Capital Territory.

3.. Pakistan's Annual State of Environment Report(s)	The spade work for the Pakistan's First State of Environment Report was done under NEIMS project but the report itself could not be produced.	Pakistan's First State of Environment Report published in year-1 and, one more annual report produced thereafter.	1. Records of the Government of Pakistan/Directorate General of Environment of the Ministry of climate change; 2. EIMS Web Portal	Most of the work is done. A limited project input and support will be needed to stimulate and enable the achievement of this important indicator of a functioning EIMS
4. Consistency and complementarities in reporting environmental information by the Federal Government and the provinces.	The environmental reporting by the Federal Government is mostly based on information supplied by the provinces. The provinces also sometimes produce their own environmental report/profiles. The information in two sets of reports is not always consistent, partly due to timing and sources. There is also a significant duplication of efforts.	1. Bench marking of Environmental Statistics of Pakistan with the EIMSNEIMS Identified Environmental Data Requirement	1. Report of bench marking of Pakistan State of the Environment Report with provincial environment reports/profiles in Punjab and KP. 2. Review of the contents of Pakistan State of the Environment Reports and provincial environment reports/profiles	It is assumed that the devolution of 'environment' post the 18th Amendment to Pakistan's constitution will not hinder collaboration, and that an agreement will have been reached on coordination of reporting by the provinces and the federal government.

5. Enhanced and improved country reporting against the three multilateral environmental agreements of CBD, UNFCCC and CCD.	Pakistan has been seeking to regularly report against the three Rio Conventions. The secretariats of the conventions often fund the preparation of these reports but the consistent availability of environmental information leaves room for improvement.	A total of three Country Reports under CBD, UNFCCC and UNCCD due during the project are produced in time with enhanced content and quality.	1. Project Progress Reports 2. Country Reports for CBD, UNFCCC and UNCCD.	Financial resources for producing the country reports as such are not a constraint. The project contribution will be mainly through refinements in primary data gathering and reporting. It will also finance analysis and research on select issues to fill any critical gaps in the reporting as a part of the overall improvements in Pakistan EIMS
6. Synergy between environmental research, reporting and practice	A lot of the research is carried out in universities but links to policy and practice are weak or missing. On the other hand, environmental organizations need resources for essential research to fill critical gaps in information.	Institute and pilot test need-based research collaboration between Ministry of climate change including directorate general of environment and Pak EPA, Provincial P&Ds together with EPAs and two universities, one each in Punjab and KP, involving a total of 12 short research assignments during the project period	1. Project Progress Reports 2. Research Reports and publications; 3. Feedback from collaborating	Existence of mutual interest is assumed. It is also assumed universities already have access to funds for their graduate students' research that it will adapt to the needs of P&D. The project will fund some additional research P&D require and wouldn't be possible to fund from universities' own resources ¹² .
Output 2.1: An Effectively Operating National Environmental Information Management System Output 2.2: Policy Research and Analysis Output 2.3: Pakistan's State of Environment Report(s) Output 2.4: Provincial State of Environment Reports including benchmarking with National State of the Environment report Output 2.5: Country Reports under Multilateral Agreements ¹³				

¹² Planning and Development departments rather than EPA will have the coordinating role, EPA including other line departments will generate data/information.

¹³ Support will be extended in the production of reports against the three conventions (CBD, UNCCD, UNFCCC) and the existing allocation for this output will be doubled from the left over allocation of deleted output (2.5)

Output 2.6: Harnessing Research Capacity and Opportunities in Universities				
Outcome 3: Enhanced commitment and capacity for sustainable development planning and legislation				
Indicators	Baseline	<i>Target</i> (end of project)	Sources of Verification[1]	Risks and Assumptions
1. Understanding of environment issues among planners for economic development in public sector	Environmental capacity in the country is limited. Much of what exists is in select environmental institutions of the governments. Officers in government ministries and departments dealing with economic development have a scant exposure to the issues of environment; and even less to global environmental obligations of Pakistan.	A core of 400 officers in economic development ministries and departments are exposed to the essentials of environment, through 90 workshops or seminars at respective ministries or departments and 12 guest-lectures in relevant training institutions.	1. Reports of relevant workshops and seminars; 2. Review of the content and resources for the workshops and seminars 3. Project Progress Reports 4. Participant's feedback	The officers are interested and available for training, and that the respective ministries, departments and institutions are supportive and would enable the organizations of training and workshops.

2. Access to environmental expertise and competence required for informed economic decision making	Past efforts of capacity building for environment have focussed on the environment functions. Little or no attention has been paid to economic development sectors where such capacities are needed most. Even in the environment functions that were targeted, lasting capacity has been hard to build, affected by the temporary nature of the initiatives and frequent transfers characterizing the civil service in Pakistan.	Develop, design and pilot test an alternate market-based approach to capacity development for environment.	1. Project Progress Reports 2. Existence of one or more environmental experts' network 3. Reports of research, analysis and reviews outsourced to think tanks and professional networks.	The Planning and Development Division, provincial P&D Departments, and EPAs are interested to explore, test and support the alternate of market-based approach.
3. Public opinion and support for environment protection and friendly development	Environmental awareness in Pakistan has certainly increased over the years but is uneven. Much of the voting public in rural areas is not literate and ignorant or at best indifferent to the broader issues of environment. Awareness raising through the written word has understandably a limited reach. TV is the only medium reaching wider public but it has had limited interest or persuasion to advocate the issues of environment.	(a) Two popular TV drama serials to Increase the environmental understanding and support of masses, reachable by popular TV, and thus stimulate popular demand for environment protection and sustainable development. (b) Likewise target opinion leaders in media (press and electronic) through 12 site visits to high profile projects.	1. Reports of the participating TV channels; 2. Report of the media visits to high profile projects 3. Monitoring of press and electronic news coverage post the high-profile site visits. 4. Project Progress reports; 5. Opinion polls before, during and after the project implementation.	The respective TV channels are interested and willing to participate in the project.

<p>4. Political Commitment and Support for protecting environment and mainstreaming sustainability in economic development</p>	<p>Members of the parliament and provincial assemblies include several environmentally enlightened individuals. Not all are however as aware and convinced of the imperative of environmental integration in economic development. This represents the major missing pillar to effectuate the country's otherwise progressive environmental policies and legislation. The current elected government in general and the Prime Minister is the stalwart of environment with commitment of massive greening programmes.</p>	<p>(a) Expose the existing standing committees on environment in different houses of public representatives, create new ones where needed though a total of 24 briefing sessions. (b) Engage a broader spectrum of politicians both at federal and provincial level by organizing site visits to high profile development projects for discussions on their economic and environmental promises and implication. About 9 such visits are envisaged. (c) Increase the number of development projects whose design is positively shaped by environmental considerations. (b) Engaging the current leadership to contribute to the project objectives, specifically related to environment information management.</p>	<p>1. Records of the parliament and provincial assemblies 2. Notes of the specific briefing section 3. Notes from site visits 4. Records of P&D Division and P&D departments in Punjab and KP related to projects positively influenced by environmental considerations; 4. Project Progress reports</p>	<p>The achievement of these indicators is not only contingent of the political leadership supporting integration of environment in development projects. Their interest and engagement in the project supported discussion and field visits is assumed and would be necessary.</p>
<p>Output 3.1. Exposure and Training of Civil Service Output 3.2. Enhanced Access of Planning Functions to Environmental Expertise Output 3.3: An Engaged Polity Output 3.4: Supportive Public Opinion through Media Support</p>				

Annex-11: TE rating scales

Ratings for Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight, Execution, Relevance	Sustainability ratings:
6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings 5 = Satisfactory (S): meets expectations and/or no or minor shortcomings 4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings 3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings 2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings 1 = Highly Unsatisfactory (HU): severe shortcomings Unable to Assess (U/A): available information does not allow an assessment	4 = Likely (L): negligible risks to sustainability 3 = Moderately Likely (ML): moderate risks to sustainability 2 = Moderately Unlikely (MU): significant risks to sustainability 1 = Unlikely (U): severe risks to sustainability Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability

Annex-10: Signed Evaluation Consultant Agreement form

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United Nations Development Programme



No. UNDP-IC-2021-319

25th October 2021

Contract for the services of an Individual Contractor

This Contract is entered into on **25th October 2021** between the United Nations Development Programme (hereinafter referred to as "UNDP") and **Muhammad Ibrahim Khan** (herein after referred to as "the Individual Contractor") whose address is House No. 630, Street No 30, Phase 3, Bahria Town, Rawalpindi, Pakistan. Cell # +92-0342 519 6235

WHEREAS UNDP desires to engage the services of Individual Contractor as "**National Consultant - GGEB Terminal Evaluation**" under Generating Global Environmental Benefits from Improved Decision Making Systems and Local Planning in Pakistan, ECCU, UNDP on the terms and conditions hereinafter set forth, and:

WHEREAS the Individual Contractor is ready and willing to accept this Contract with UNDP on the said terms and conditions,

NOW, THEREFORE, the Parties hereby agree as follows:

1. Nature of services

The Individual Contractor shall perform the services as described in the Terms of References which form an integral part of this Contract and are attached hereto as *Annex I* in the following Duty Station(s):

Duty Station: Home Based, Islamabad-Pakistan

2. Duration

This Individual Contract shall be effective from **26th October 2021** and shall expire upon satisfactory completion of the services described in the Terms of Reference mentioned above, but not later than **25th January 2022** (03 months), unless sooner terminated in accordance with the terms of this Contract. This Contract is subject to the General Conditions of Contract for Individual contractors which are available on UNDP website at www.undp.org/procurement and are attached hereto as *Annex II*.

3. Consideration

As full consideration for the services performed by the Individual Contractor under the terms of this Contract, UNDP shall pay the Individual Contractor a lump sum cost **PKR 1,900,000/- (PKR One Million Nine Hundred Thousand Only)**. The payment is linked with below deliverables and shall be release upon satisfactory completion of milestones report certified by and Assistant Resident Representative, ECCU, UNDP.

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Kamran Abbas

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Deliverables:

#	Deliverable	Description	Responsibilities	Fee%	Amount (PKR)
1	TE Inception Report	TE consultant clarifies objectives and methods of Terminal Review	TE consultant submits to the Commissioning Unit and project management	20%	380,000/-
2	Presentation	Initial Findings	TE consultant presents to project management and the Commissioning Unit		-----
3	Draft Final Report	Full report (using guidelines on content outlined in Annex B) with annexes	Sent to the Commissioning Unit, reviewed by RTA, Project Coordinating Unit, GEF ODP	40%	760,000/-
4	Final Report*	Revised report with audit trail detailing how all received comments have (and have not) been addressed in the final TE report	Sent to the Commissioning Unit	40%	760,000/-
GRAND TOTAL (PKR)				100%	1,900,000/-

If unforeseen travel outside the Duty Station not required by the Terms of Reference is requested by UNDP, and upon prior written agreement, such travel shall be at UNDP's expense and the Individual Contractor shall receive a *per diem* mutual agreed between both parties but not to exceed United Nations daily subsistence allowance rate in such other location(s).

Where two currencies are involved, the rate of exchange shall be the official rate applied by the United Nations on the day the UNDP instructs its bank to effect the payment(s).

4. Rights and Obligations of the Individual contractor

The rights and obligations of the Individual Contractor are strictly limited to the terms and conditions of this Contract, including its Annexes. Accordingly, the Individual Contractor shall not be entitled to

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Kennel Amos

Ali Saied

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any benefit, payment, subsidy, compensation or entitlement, except as expressly provided in this Contract. The Individual Contractor shall be solely liable for claims by third parties arising from the Individual Contractor's own acts or omissions in the course of performing this Contract, and under no circumstances shall UNDP be held liable for such claims by third parties.

5. Beneficiary

The Individual Contractor selects Furhat Banu Khan as beneficiary of any amounts owed under this Contract in the event of death of the Individual Contractor while performing services hereunder. This includes the payment of any service-incurred liability insurance attributable to the performance of the services for UNDP.

IN WITNESS WHEREOF, the Parties hereto have executed this Contract.

By signing below, I, the Individual Contractor, acknowledge and agree that I have read and accept the terms of this Contract, including the General Conditions of Contracts for Individual contractors available on UNDP website at www.undp.org/procurement and attached hereto in Annex II which form an integral part of this Contract, and that I have read and understood, and agree to abide by the standards of conduct set forth in the Secretary-General's bulletins ST/SGB/2003/13 of 9 October 2003, entitled "Special Measures for Protection from Sexual Exploitation and Sexual Abuse" and ST/SGB/2002/9 of 18 June 2002, entitled "Regulations Governing the Status, Basic Rights and Duties of Officials other than Secretariat Officials, and Experts on Mission".

AUTHORIZING OFFICER: United Nations Development Programme	INDIVIDUAL CONTRACTOR:
<div>"For"  24-Oct-2021</div> <div>Knut Ostby Resident Representative</div>	<div> 26-10-2021</div> <div>Muhammad Ibrahim Khan Subscriber</div>

Ali Saeed

Karwal Abbas

Annex-11: Signed UNEG Code of Conduct form

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ToR Annex E: UNEG Code of Conduct for Evaluators

Independence entails the ability to evaluate without undue influence or pressure by any party (including the hiring unit) and providing evaluators with free access to information on the evaluation subject. Independence provides legitimacy to and ensures an objective perspective on evaluations. An independent evaluation reduces the potential for conflicts of interest which might arise with self-reported ratings by those involved in the management of the project being evaluated. Independence is one of ten general principles for evaluations (together with internationally agreed principles, goals and targets: utility, credibility, impartiality, ethics,

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: Muhammad Ibrahim Khan

Name of Consultancy Organization (where relevant): NA

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

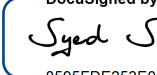
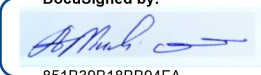

Signed at: Islamabad (Place) on 21 Nov 2021 (Date)

Signature: 

transparency, human rights and gender equality, national evaluation capacities, and professionalism).

Street Address: 4th Floor, Serena Business Complex, Khayaban-e-Suhrawardy, Sector G-5/1, Islamabad
Postal Address: P. O. Box 1051, Islamabad, Pakistan. Tel: (9251) 8355600 Fax: (9251) 360025455. www.unep.org/unep

Annex-12: Signed TE report clearance form

Evaluation Report Reviewed and Cleared by	
UNDP Country Office	
Name: <u>Aliona Niculita Deputy Resident Representative</u>	<div>DocuSigned by:</div>  <div>8595FDE253E04A5...</div> <div>Syed Sabeeh</div>
<div>DocuSigned by:</div>  <div>851B39B18BB94FA...</div>	Date: <u>09-Mar-2022</u>
UNDP GEF RTA	
Name: <u>Ms. Thania Eloina Felix Canedo</u>	<u>Regional Technical Advisor</u>
<div>DocuSigned by:</div>  <div>E6EE544211884CB...</div>	Date: <u>09-Mar-2022</u>

Separate annexes to the TE (Tracking Tool and Audit trail)

- a. Final Tracking Tool (Capacity Development scorecard)
- b. Audit trail with all comments obtained for draft TE