

Using systemic approaches and simulation to scale nature-based infrastructure for climate adaptation

Basic Information

GEF ID

10632

Countries

Global

Project Title

Using systemic approaches and simulation to scale nature-based infrastructure for climate adaptation

GEF Agency(ies)

UNIDO

Agency ID

UNIDO: 200172

GEF Focal Area(s)

Climate Change

Program Manager

Aloke Barnwal

PIF

Part I – Project Informatic

Focal area elements

1. Is the project/program aligned with the relevant GEF focal area elements in Table A, as defined by the GEF 7 Programming Directions?

Secretariat Comment at PIF/Work Program Inclusion

Yes, the project is aligned with SCCF programming strategy. It aims to create an enabling environment to scale up investment in nature based infrastructure for climate change adaptation. It adopts an innovative systems based approach for valuation of NBI which will enable public and private sector investment in NBI for climate change adaptation. It is aligned with SCCF CCA objective 2 of climate adaptation mainstreaming and CCA objective 2 to enable private sector investment in adaptation solutions.

Agency Response

Indicative project/program description summary

2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?

Secretariat Comment at PIF/Work Program Inclusion Yes. The components are sound, comprehensive and integrated to deliver the project objectives and indicators.

Agency Response

Co-financing

3. Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines, with a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized?

Secretariat Comment at PIF/Work Program Inclusion Co-financing is documented appropriately and description of investment mobilized has been provided. The break-up of co-financing for each components is also appropriately provided.

Agency Response

GEF Resource Availability

4. Is the proposed GEF financing in Table D (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):

Secretariat Comment at PIF/Work Program Inclusion Yes.

Agency Response

The STAR allocation?

Secretariat Comment at PIF/Work Program Inclusion NA

Agency Response

The focal area allocation?

Secretariat Comment at PIF/Work Program Inclusion NA

Agency Response

The LDCF under the principle of equitable access

Secretariat Comment at PIF/Work Program Inclusion NA

Agency Response

The SCCF (Adaptation or Technology Transfer)?

Secretariat Comment at PIF/Work Program Inclusion SCCF Adaptation fund is sought for the project.

Agency Response

Focal area set-aside?

Secretariat Comment at PIF/Work Program Inclusion NA

Agency Response

Impact Program Incentive?

Secretariat Comment at PIF/Work Program Inclusion NA

Agency Response

Project Preparation Grant

5. Is PPG requested in Table E within the allowable cap? Has an exception (e.g. for regional projects) been sufficiently substantiated? (not applicable to PFD)

Secretariat Comment at PIF/Work Program Inclusion PPG requested is within the allowable cap.

Agency Response

Core indicators

6. Are the identified core indicators in Table F calculated using the methodology included in the correspondent Guidelines? (GEF/C.54/11/Rev.01)

Secretariat Comment at PIF/Work Program Inclusion Core indicators have provided and estimated using the SCCF tracking tool.

Agency Response

Project/Program taxonomy

7. Is the project/ program properly tagged with the appropriate keywords as requested in Table G?

Secretariat Comment at PIF/Work Program Inclusion Yes.

Agency Response

art II – Project Justification

1. Has the project/program described the global environmental / adaptation problems, including the root causes and barriers that need to be addressed?

Secretariat Comment at PIF/Work Program Inclusion

Yes, the adaptation needs and key vulnerability issues are described well. The importance of Nature Based Infrastructure and root causes of not mainstreaming them in adaptation planning is also elaborated well. The PIF identifies lack of valuation of NBI as a key barrier and aims to address this barrier through this project.

Agency Response

2. Is the baseline scenario or any associated baseline projects appropriately described?

Secretariat Comment at PIF/Work Program Inclusion

Yes.

Agency Response

3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?

Secretariat Comment at PIF/Work Program Inclusion

The outcomes and components are described well. It elaborates the methodology to be used for valuation which has been piloted and validated externally including by EU Copernicus Climate Data Store and UN System for Environmental and Economic Accounts, Experimental Ecosystem Accounts (SEEA EEA).

Agency Response

4. Is the project/program aligned with focal area and/or Impact Program strategies?

Secretariat Comment at PIF/Work Program Inclusion

NA

Agency Response

5. Is the incremental / additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?

Secretariat Comment at PIF/Work Program Inclusion

The additional cost reasoning is sound. The project will be a value added contribution to global work on adaptation to advance nature based solutions and nature based infrastructure in particular. It will also add value to GEF's adaptation programming to systematically factor in nature based infrastructure based on strong economic valuation based evidence.

Agency Response

6. Are the project's/program's indicative targeted contributions to global environmental benefits (measured through core indicators) reasonable and achievable? Or for adaptation benefits?

Secretariat Comment at PIF/Work Program Inclusion

The Agency is recommended to revise the core indicators 1 and 2. The project will support 46 valuations and the estimate that 50% of these will move forward is well noted. However, we recommend that a further factor of nearly 50% is being considered to reflect the incremental support that these valuations will provide. Just using the beneficiaries of the targeted project as beneficiaries of this project doesn't look appropriate. The catalytic nature of the project which will build capacity of project stakeholders and provide them evidence which will be able to directly influence a certain portion of the project's impact or some incremental increase in the impact.

Therefore, we suggest to consider estimated beneficiaries as 115,000 instead of 230,000. Following the same rationale, please consider revision for indicator 2 also.

23 policies and programs in indicator 3 is also on higher side. We suggest to be more conservative at PIF stage and revise it upwards if needed at endorsement stage.

July 15, 2020

The revised indicators are fine. Comment cleared.

Agency Response

07/14/2020

We have revised the explanatory note and the tracking tool excel file in line with the GEF's comments:

- Indicator 1 and 2 are reduced with 50%
- Indicator 3 is reduced from 23 to 15

7. Is there potential for innovation, sustainability and scaling up in this project?

Secretariat Comment at PIF/Work Program Inclusion

The project is one of the first initiatives to do economic valuations of nature based infrastructure by integrating climate data for adaptation purpose.

The overall design of the project is to create an enabling environment for NBI implementation by building capacity of decision makers while doing the valuations, creating public data base and developing partnerships. This approach will ensure long term sustainability and scalability of the project's impact.

Agency Response

Project/Program Map and Coordinates

Is there a preliminary geo-reference to the project's/program's intended location?

Secretariat Comment at PIF/Work Program Inclusion

Yes, a preliminary map is provided.

Agency Response

Stakeholders

Does the PIF/PFD include indicative information on Stakeholders engagement to date? If not, is the justification provided appropriate? Does the PIF/PFD include information about the proposed means of future engagement?

Secretariat Comment at PIF/Work Program Inclusion

As indicated in the question, please provide information about the stakeholders engaged during the project development. The stakeholder engagement plan during the project implementation is fine.

July 15, 2020

Thanks. Comment cleared.

Agency Response

07/14/2020

The following additional text was entered:

[quote] As this project draws on 4 years of experience in carrying out valuations of NBI and infrastructure more widely, this project inherently is building up on extensive stakeholder consultation.

- Local communities were consulted through ongoing NBI valuations in Senegal, South Africa, India, Sri Lanka, Tanzania, to ensure the the NBI valuations results can be used by them to advance the use of nature as a source of livelihoods, diversified revenues and a cost

the NBI valuations results can be used by them to advance the use of nature as a source of livelihoods, diversified revenues and a cost effective adaptation solution. IISD also consulted with the global federation of local authorities ICLEI.

- Civil society organisations were consulted including WWF Africa and WWF South Africa, IUCN, EcoShape, Wetlands International, Global Green Growth Institute; New Climate Economy, Birdlife International. Consultations pertained to the use of system dynamics and project finance simulation to value, in dollar terms, ecosystem services and co-benefits. Consultations also included how these organisations can use NBI valuations to design more effective conservation strategies, to use NBI for climate adaptation and also to start discussions with project developers and impact investors.
 - Private sector NBI project developers such as Van Oord and DEME, hybrid infrastructure design and engineering specialists such as Arup and Lagarde Design solution were consulted on their interest to use simulations to integrate more NBI into urban and coastal resilience.
 - Private investor networks such as Global Impact Investor Network (GIIN) and Conservation Finance were consulted on blended financing for NBI
 - Policy makers we consulted on their interest to use NBI valuations to design more synergistic industrial development and adaptation policies. These policies could take into account the cost of restoring nature to deliver ecosystem services that bring infrastructure benefits rather than only relying on grey-infrastructure solutions.
 - Public budget holders were consulted on their appetite to allocate infrastructure development budgets to NBI, especially to hybrid green-grey and blue-grey solutions.
 - Local research organisations were consulted on project level data and their interest to participate in project specific data collection. They were also consulted on their interest to use simulation for NBI.
 - Domestic banks and domestic investors were consulted to assess their interest, appetite, and openness to consider nature as an asset.
- Furthermore, the entire project, across the components, emphasises ... [unquote]

Gender Equality and Women's Empowerment

Is the articulation of gender context and indicative information on the importance and need to promote gender equality and the empowerment of women, adequate?

Secretariat Comment at PIF/Work Program Inclusion

Yes.

Agency Response

Private Sector Engagement

Is the case made for private sector engagement consistent with the proposed approach?

Secretariat Comment at PIF/Work Program Inclusion

Yes

Agency Response

Risks to Achieving Project Objectives

Does the project/program consider potential major risks, including the consequences of climate change, that might prevent the project objectives from being achieved or may be resulting from project/program implementation, and propose measures that address these risks to be further developed during the project design?

Secretariat Comment at PIF/Work Program Inclusion

Yes.

Agency Response

Coordination

**Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined?
Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?**

Secretariat Comment at PIF/Work Program Inclusion

The Resource Center is proposed as the PMU in the organogram. However, the Resource Center seems to have a broader function than just be the PMU as described in the PIF. We suggest including Resource Center as part of the project Execution function and link the Resource Center and Advisory Committee with the PMU.

July 15, 2020

The revised version submitted in the portal does not reflect the updated institutional structure. Please update.

July 15, 2020

Comment cleared

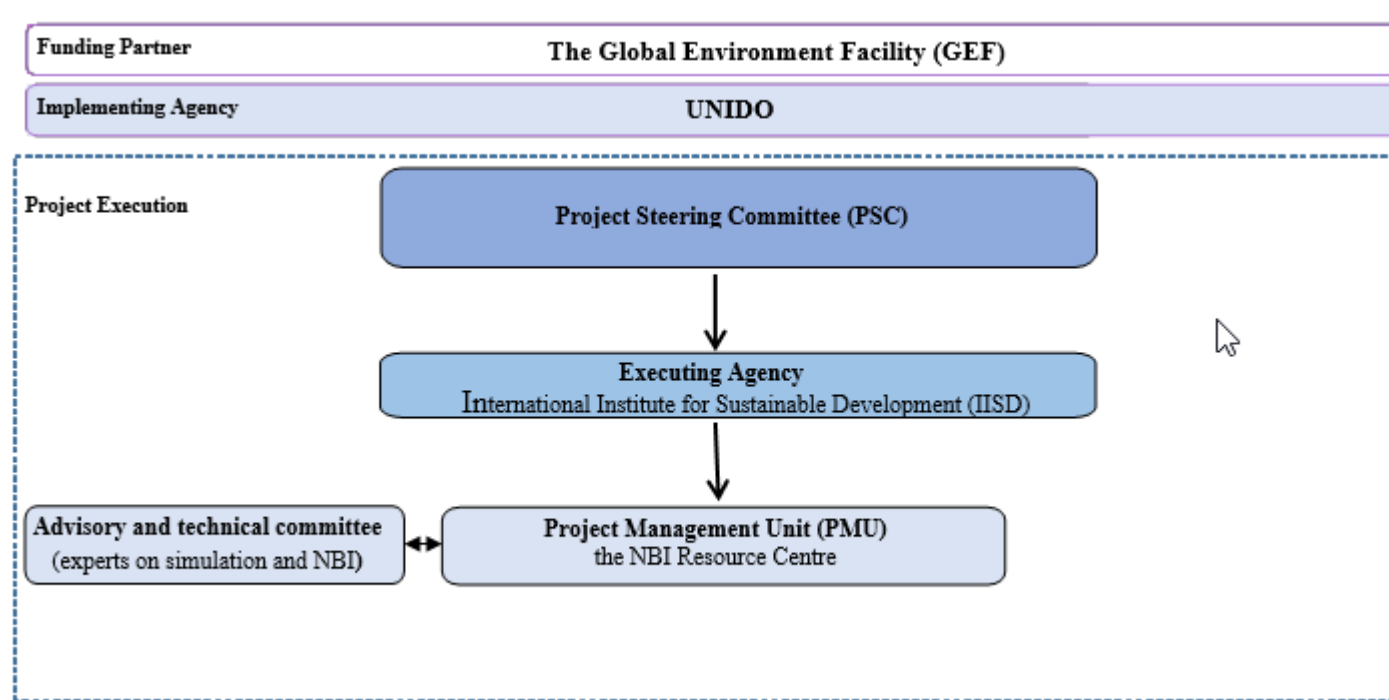
Agency Response

07/14/2020

The following clarifications have been provided:

[quote] The NBI resource centre will also serve as the project management unit. Thus, it will be staffed with subject matter experts as required to carry out the valuations, provide advisory services and take charge of advocacy work as well as with project management experts from IISD as required for close cooperation with the designated UNIDO project manager to ensure smooth coordination and management of the project. In order to assure cross-fertilization with other activities the NBI resource center will consult and exchange on all subject matter issues with a technical and advisory committee. The composition, responsibilities and modus operandi of the technical and advisory committee will be determined during the PPG phase. [unquote]

The graphic showing the execution modalities has been adjusted accordingly:



Consistency with National Priorities

Has the project/program cited alignment with any of the recipient country's national strategies and plans or reports and assessments under relevant conventions?

Secretariat Comment at PIF/Work Program Inclusion

The section includes a list of multiple global agreements and strategies, many of which are not relevant to this project.

The link of NBI as a priority for EU needs to be presented in a different perspective given that they are not going to be beneficiaries of the project. A number of climate vulnerable countries prioritize natural resource management as part of their adaptation plans and also sectoral plans such as for agriculture, water and urban development. These and other national priority alignment from beneficiary country perspectives could be articulated.

July 15, 2020

Can you please check if the below list of policies can be removed from the portal entry? Many of these are not relevant for this project.

- National Bio Strategy Action Plan (NBSAP)
- CBD National Report
- Cartagena Protocol National Report
- Nagoya Protocol National Report
- UNFCCC National Communications (NC)
- UNFCCC Biennial Update Report (BUR)
- UNFCCC National Determined Contribution
- UNFCCC Technology Needs Assessment
- UNCCD Reporting
- ASGM National Action Plan (ASGM NAP)
- Minamata Initial Assessment (MIA)
- Stockholm National Implementation Plan (NIP)
- Stockholm National Implementation Plan Update
- National Adaptation Programme of Action Update
- Others

July 15, 2020

Comment cleared

Agency Response

07/14/2020

This has been changed to:

[quote] The UNFCCC process that provides the overall framework for this proposal are:

- Nationally Determined Contributions (NDC): a document where actions are listed for mitigation and adaptation

(<https://unfccc.int/nationally-determined-contributions-ndcs>).

- National Adaptation Plans (NAP): The NAP process helps countries conduct comprehensive medium- and long-term climate adaptation planning. It is a flexible process that builds on each country's existing adaptation activities and helps integrate climate change into national decision-making. <https://unfccc.int/topics/adaptation-and-resilience/workstreams/national-adaptation-plans> (there also sectoral plans, e.g. on health - HNAPs)
- National Communications to the UNFCCC: this is a document that primarily present past performance, which is where the performance of nature based projects can be mentioned.

Countries are also increasing NBI as key component of their adaptation plans and strategies. The project will directly inform several sectoral planning processes, including for infrastructure that could be complemented or replaced by nature-based solutions. This is of particular relevance in the case of agriculture, water, urban development as well as cross-sectoral national development plans.

The IISD National Adaptation Plan (NAP) Network, that works with 140 countries informs us that countries are starting to include nature-based infrastructure as an adaptation strategy, but the challenge lies in the lack of expertise to plan, predict, budget and eventually execute NBI solutions. Further evidence is that focus on NBI is increasing comes from the GCA, that has nature-based infrastructure as an action track. E.g. Viet Nam has sought support from the German Ministry for the Environment, Nature Conservation and Nuclear Security for the implementation of Viet Nam's adaptation targets in its NDC in the area of nature-based solutions (NbS) and ecosystem-based adaptation (EbA),

The global leadership provided by the EU on nature and climate is also important to note, as it will be advance the agenda on NBI. Of particular note is the Horizon Europe grant framework which includes cities and grantees outside the EU. The framework includes a strong focus on nature-based solutions as well as 're-naturing' cities. Another EU policy that will influence NBI for climate adaptation at the global level is EU Action plan for resilience in crisis prone countries which includes countries outside the EU. Broader leadership through the EU biodiversity strategy and the EU Green Deal will also drive global interest and demand for NBI. [unquote]

Knowledge Management

Is the proposed "knowledge management (KM) approach" in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations; and contribute to the project's/program's overall impact and sustainability?

Secretariat Comment at PIF/Work Program Inclusion

Knowledge management is central to the project and is elaborated well.

Agency Response

Environmental and Social Safeguard (ESS)

Are environmental and social risks, impacts and management measures adequately documented at this stage and consistent with requirements set out in SD/PL/03?

Secretariat Comment at PIF/Work Program Inclusion

Yes.

Agency Response

art III – Country Endorsements

Has the project/program been endorsed by the country's GEF Operational Focal Point and has the name and position been checked against the GEF data base?

Secretariat Comment at PIF/Work Program Inclusion

It's a global project and therefore doesn't need OFP endorsement.

Agency Response

Termsheet, reflow table and agency capacity in NGI Projects

Does the project provide sufficient detail in Annex A (indicative termsheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table in Annex B to assess the project capacity of generating reflows? If not, please provide comments. After reading the questionnaire in Annex C, is the Partner Agency eligible to administer concessional finance? If not, please provide comments.

Secretariat Comment at PIF/Work Program Inclusion

NA

Agency Response

EFSEC DECISION

RECOMMENDATION

Is the PIF/PFD recommended for technical clearance? Is the PPG (if requested) being recommended for clearance?

Secretariat Comment at PIF/Work Program Inclusion

The Agency is requested to address the comments made in the review sheet and re-submit the project.

Yes, the PIF is recommended for technical clearance and PPG is recommended for clearance.

ADDITIONAL COMMENTS

Additional recommendations to be considered by Agency at the time of CEO endorsement/approval.

Secretariat Comment at PIF/Work Program Inclusion

At the CEO Endorsement stage, the Agency is requested to provide a more detailed indication of geographical focus of the project. Also, the full proposal should provide more details on the baseline on NBS and efforts related to valuation of natural infrastructure. Further, the full project could also establish a more firm linkage with global platforms and conventions to ensure large scale uptake of evidence generated and outcomes from this project.

Review Dates

	PIF Review	Agency Response
First Review	7/13/2020	7/14/2020
Additional Review (as necessary)	7/15/2020	
Additional Review (as necessary)		
Additional Review (as necessary)		
Additional Review (as necessary)		

PIF Recommendation to CEO

Brief reasoning for recommendations to CEO for PIF Approval

The project aims to create an enabling environment for scaling up Nature Based Infrastructure (NBI) by increasing certainty and predictability on the performance of natural assets as solutions for climate adaptation.

It will do so by carrying out economic and biophysical valuation of ecosystems services and co-benefits provided by NBI to enhance adaptation. The project will use innovative and verified simulation methodology which incorporates system dynamics and project finance

modelling for the valuation and will systematically integrate climate data from the EU Copernicus Climate Data Store in the models. In addition to demonstrating valuation of selected Nature Based Infrastructure projects, the project will create an interactive public online database for NBI valuation; build capacity of decision makers and users through workshops and a Massive Online Open Course; and develop partnerships for global outreach and uptake of NBI. The project has been developed through extensive consultation with stakeholders including with the Mava Foundation which is providing \$2 million co-financing to scale up the project's impact. The project will address a critical barrier of limited understanding of nature's potential to provide adaptation benefits and services and will establish natural infrastructure as tangible and reliable assets for attracting public and private infrastructure investment.

The project will adopt a systems based approach and will focus on biologically diverse forests, mangroves, wetlands, grasslands and agricultural lands among others as NBI. The valuation will also provide a comparative analysis vis-à-vis grey infrastructure to make the economic case of NBI and also to advance greater use of green-grey infrastructure mix for resilience to slow onset and rapid onset impacts of climate change. The project will benefit 115,000 climate vulnerable people and support 21,425 hectares of land management for climate resilience. Through the valuation exercise the project will directly build capacity of 2340 people involved in NBI planning and implementation. By strategically engaging countries in the valuation work, the project is expected to influence 15 adaptation policies and plans to mainstream NBI. Overall, the project aims to increase confidence of all market participants including project developers, design and engineering firms, cities, national governments, public and private investors in the use and performance on NBI.

Finally, the project will provide strong evidence base for GEF and its partners to mainstream NBI in its investments and will contribute to the Nature Based Solutions (NBS) Action Track of the Global Commission on Adaptation.