United Nations Environment Programme

Final	**Terminal Evaluation of the UNEP/GEF Project: "Project for Ecosystem Services (ProEcoServ)"** **[GEF project ID: 3807]**

The Salar de Atacama, close to Toconao and San Pedro de Atacama, northern Chile, March 2016, with communities of microbial extremophiles in the foreground and volcanoes of the Central Andes in the distance

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Project Identification Table

UNEP PIMS ID:	n/a	**IMIS number:**	4B34
Sub-programme:	Ecosystem Management	**Expected Accomplishment(s):**	
UNEP approval date:	02 August 2010	**Programme of Work Output(s):**	Ecosystem Management
GEF project ID:	3807	**Project Type:**	FSP
GEF Operational Programme #:	2	**Focal Area(s):**	Biodiversity
GEF approval date:	August 2009	**GEF Strategic Priority/Objective:**	BD-SP4; BD-SP5
Expected Start Date:	September 2009	**Actual start date:**	2 August 2010
Planned completion date:	September 2014	**Actual completion date:**	December 2015
Planned project budget at approval:	US$ 25, 917,188	**Total expenditures reported as of [23 June 2016]:**	USD 15,716,631
GEF Allocation:	US$ 6, 296, 637	**GEF grant expenditures reported as of [23 June 2016]:**	USD 6,257,188
Expected MSP/FSP co-financing:	US$ 19, 620, 551	**Secured MSP/FSP co-financing:**	US$ 25,917,188
First Disbursement:	28 January 2011	**Date of financial closure:**	December 2015
No. of revisions:	2	**Date of last revision:**	25 March 2015
Date of last Steering Committee meeting:	28 May 2014		
Mid-term review/ evaluation (planned date):	March 2012	**Mid-term review/ evaluation (actual date):**	Report dated August 2013
Terminal Evaluation (actual date):	December 2015 - June 2016		

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List of acronyms & abbreviation

Acronym/Abbreviation	Meaning
BAAM	Business-Adopt-A-Municipality (South Africa)
BD	Biodiversity
BSP	Bali Strategic Plan
CBD	Convention on Biological Diversity
CCSP	Climate Change Subprogramme (UNEP)
CEAZA	Center for Advanced Studies on Arid Zones, Chile
CONAF	Corporación Nacional Forestal (National Forest Corporation, Chile)
CoP	Convention of the Parties
CPA	Consejo de Pueblos Atacameños (Council of Atacameño Peoples) (Chile)
CSIR	Council for Scientific and Industrial Research (South Africa)
CSO	Central Statistics Office (Trinidad and Tobago)
DCSP	Disasters and Conflicts Subprogramme (UNEP)
DCPI	Division of Communication and Public Information (UNEP)
DEA	Department of Environment Affairs (South Africa)
DELC	Division of Environmental Law and Convention (UNEP)
DEPI	Division of Environmental Policy Implementation (of UNEP)
DGA	Dirección General de Aguas (Chile)
DGEF	(former) Division of GEF (of UNEP)
DONRE	Department of Natural Resources and Environment (Vietnam)
DRR	Disaster Risk reduction
DSS	Decision Support System
DTIE	Division of Technology, Industry and Economics (UNEP)
DWA	Department of Water Affairs (South Africa)
EA	Executing Agency
EbA	Ecosystem based adaptation
EIA	Environmental Impact Assessment
EMSP	(UNEP) Ecosystem Management Subprogramme
EO	Evaluation Office (of UNEP)
ES	Ecosystem Service
ESE	Ecosystems Services and Economics (Unit of DEPI, UNEP)
ERP	Enterprise Resource Planning (system of the UN - Umoja)
FEPA	Freshwater Ecosystem Priority Areas
FMO	Financial Management Officer
FSP	(GEF) Full Size Project
GEF	Global Environment Facility
GHG	Green House Gas
GIB	Globally Important Biodiversity
GLOBE	Global Legislators Organisation for a Balanced Environment
GMS	Greater Mekong Subregion
GPM	Global Project Manager
HQ	Headquarters

Acronym/Abbreviation	Meaning
IA	GEF Implementing Agency (UNEP)
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IO	Immediate project outcome
ISPONRE	Institute of Strategy and Policy on Natural Resources and Environment, Vietnam
IUCN	International Union for the Conservation of Nature
LD	Land degradation
M&E	Monitoring and Evaluation
MA	Millennium Ecosystem Assessment (Millennium Assessment)
MARD	Ministry of Agriculture and Rural Development (Vietnam)
MEA	Multilateral Environment Agreements
MoE	Ministry of Environment (Chile)
MOF	Ministry of Finance (Vietnam)
MONRE	Ministry of Natural Resources and Environment (Vietnam)
MPHE	Ministry of Planning Housing and Environment (Trinidad and Tobago)
MPSD	Ministry of Planning & Sustainable Development (Trinidad and Tobago)
MPI	Ministry of Planning and Investment (Vietnam)
MTE	Mid-Term Evaluation
MTO	Medium term outcomes
MTS	(UNEP) Mid Term Strategy
N/A	Not applicable
NBSAP	National Biodiversity Strategy and Action Plan
NCA	Natural Capital Accounting
NCE	No Cost Extension
NDP	National Development Plan (South Africa)
NGO	Non-Governmental Organisation
NSDS	National Spatial Development Strategy (Trinidad and Tobago)
NWRS	National Water Resource Strategy
OECD	Organisation for Economic Co-operation and Development
PCA	Project Cooperation Agreements
PES	Payment for Ecosystem Services
PIR	Project Implementation Review (annual)
PMU	Project Management Unit
PPG	Project Preparation Grant
ProDoc	Project Document
PSC	Project Steering Committee
REDD	Reduced Emissions from Deforestation and Degradation
ROtI	Review of Outcomes to Impacts
SANBI	South African National Biodiversity Institution
SANParks	South Africa National Parks
SDG	Sustainable Development Goal
SEA	Strategic Environmental Assessment
SEEA	System of Environmental-Economic Accounting
SERNATUR	National Tourism Service (Chile)
SGA	Sub-Global Assessments

Acronym/Abbreviation	Meaning
SIDS	Small Island Developing States
SIP	Strategic Integrated Projects
SMART	Specific, Measurable, Attainable, Relevant & Time-bound
SME	Small- and medium-sized enterprises
SPA	San Pedro de Atacama (Chile)
SWSA	Strategic Water Source Areas
TCPD	Town and Country Planning Division (Trinidad and Tobago)
TE	Terminal Evaluation
TEEB	The Economics of Ecosystems and Biodiversity
THA	Tobago House of Assembly
TM	(UNEP) Task Manager
ToC	Theory of Change
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme (UNEP)
UNON	United Nations Office in Nairobi
UWI	University of the West Indies, Trinidad and Tobago
VANTAGE	Valuation and Accounting of Natural Capital for Green Economy programme
WAVES	Wealth Accounting and the Valuation of Ecosystem Services
WB	World Bank
WWF	World Wide Fund for Nature

Executive summary

Evaluation background and methodology

1. The Terminal Evaluation of the Project for Ecosystem Services – also known as 'ProEcoServ' (the name used here) was undertaken to assess project performance (in terms of relevance, effectiveness and efficiency), and determine the degree of achievement and/or likelihood of outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The Terminal Evaluation took place between December 2015 and June 2016, the initial timing arranged to coincide with the final administrative and financial planning activities to conclude and close the Project. The lengthy period for the evaluation was due to significant delays within UN Environment and United Nations Office in Nairobi (UNON) over contracting the consultant and availability of personnel, and authorizing travel arrangements and difficulties due to the evaluation budget.

2. The Terminal Evaluation was undertaken as a mix of desk reviews of project documents and other relevant literature and studies, and in-depth interviews (face-to-face, by Skype or telephone, and by email) with UN Environment, the national executing agencies (Center for Advanced Studies on Arid Zones [CEAZA] in Chile, the Council for Scientific and Industrial Research (CSIR) in South Africa (and for Lesotho), the University of the West Indies (UWI) in Trinidad and Tobago, and the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) in Vietnam) and other local, national and international stakeholders involved in the design, implementation and management of the project. The consultant visited Trinidad and Tobago in January 2016, UN Environment Headquarters (in Kenya) in early March 2016 and Chile in late March 2016, to hold interviews with individuals from key stakeholder groups, including visits to some of the sites where the project had undertaken field activities. Interviews continued until late May 2016.

Summary of the main evaluation findings

A. Strategic relevance:

3. The project contributed to the Biodiversity and Land Degradation Focal Areas of Global Environmental Facility (GEF), and some of the project's sub-components at local level are also relevant to the Land Degradation and Climate Change focal areas. The project fitted well under UN Environment's Medium Term Strategy for 2010-2013, contributed indirectly to all three Expected Accomplishments of Medium Term Strategy within the Ecosystem Management Subprogramme for 2010-2013, and complements a number of the UN Environment projects under its Ecosystem Management and Climate Change sub-programmes, including follow-up work on the Millennium Ecosystem Assessment (MA) and Global Legislators Organisation for a Balanced Environment (GLOBE), and work being undertaken by the UN Environment/Division of Environmental Policy Implementation (DEPI) and especially Ecosystems Services and Economics[1] Unit. The project has helped to build capacity to mainstream ecosystem services into national and local development policy and decision-making frameworks which are seen as a priority in all four target countries, and it was designed based on clear national priorities identified during the project preparation period. Indeed, stakeholders considered the project to have become more relevant as it has progressed.

B. Achievement of outputs:

4. Almost all outputs were delivered and generally they were delivered well. There were some excellent results from the three pilot sites in South Africa (Eden District which focused on disaster risk

[1] See *http://www.unep.org/depi/EcosystemServicesandEconomics/tabid/6389/Default.aspx*

management using an ecosystem-based management approach, Olifants Catchment where the focus was on sustainable water resource management, and a transboundary river catchment between Lesotho and South Africa which was looking to address soil erosion and regeneration that could potentially threaten the new Polihali Dam). Vietnam also had very good delivery of outputs at the national level (provincial level difficult to assess), and a good set of outputs at the Ca Mau Province, including land use maps for the Ca Mau Natural Park. There were some important ecosystem service mapping and valuation studies from Trinidad and Tobago, including some innovative research on pollination, although there were delays over delivery and the piloting of Strategic Environmental Assessment guidelines and natural capital accounting were less successful (however the results do form a useful baseline for future work). Chile developed two decision support systems for water and tourism management, although there are issues over their sustainability. Delivery of global level outputs was mixed although the project team did present the project in many international events. The Ecosystems Services and Economics Unit in Nairobi produced some good publications, but awareness of the project within UN Environment and wider ecosystems services community was lower than would have been expected.

C. Effectiveness (attainment of project objectives and results):

5. The project has increased technical capacity (tools, systems, information, new networks, trained staff) available to decision- and policy-makers to analyse how their decisions impact ecosystem services, with notable examples including uptake of tools and approaches including land use planning in the Town and Country Planning Division in Trinidad and Tobago and the co-development of maps of important freshwater ecological infrastructure from the Olifants catchment in South Africa which were then used to integrate ecosystem services into water management decisions, and the co-development of a framework to guide new investments in ecological infrastructure in South Africa, as well as a land use plan for the Ca Mau National Park in Vietnam which includes ecosystem services maps.

6. There has also been a notable increase in awareness and understanding of ecosystems services and their value among targeted stakeholders, with increased involvement of stakeholders in decision-making processes, such at San Pedro de Atacama, Chile where there have been additional knock-on benefits for indigenous community (increased ability to engage in public debate over local developments). The project has also produced a substantial body of scientific and economic data on ecosystem services.

7. There have been some good examples where the project has influenced the uptake of ecosystem services approaches, tools, systems and knowledge into policy, legal and planning frameworks in all four countries, with notable examples being the National Spatial Development Strategy in Trinidad and Tobago, the project's contribution to the development of a map of Strategic Water Source Areas of South Africa, and the national Green Growth Strategy in Vietnam. There are also some examples of increased investment (both public and private investment) in ecosystem services approaches as a direct result of the project, especially in South Africa, and ProEcoServ has helped to raise the profile and perceived relevance of ecosystem services approaches in national development processes. However, it is difficult to say to what extent the project has achieved its aim of the global level component of 'strengthening the science-policy interface for ecosystem-conscious policy making at the international level' (see also recommendation 2 in the main report). The project has not shown any immediate (measured) reduction in threats to biodiversity or ecosystem service provision, but these impacts are judged moderately likely if assumptions are met and drivers sustained.

8. There was limited engagement with the private sector in the project as the project's focus was largely on government sector.

D. Sustainability:

9. There are concerns about the sustainability of some of the project's results with the level of ownership among key stakeholders and targeted users of the project's tools and other results mixed. This is of most concern at San Pedro de Atacama in Chile where there was no formal agreement on the handover of the two Decision Support System tools (related to tourism and water) co-developed through the project and it has been over a year since the project was operational closed at San Pedro de Atacama. Additional funding will be needed at San Pedro de Atacama to facilitate the transfer of ownership of the tools to the local decision-makers, and to ensure associated data collection systems are established. Sustainability of results in South Africa was very good, with sustainability considered early on, and there is a very good level of ownership of products from the project (maps, data) in Trinidad and Tobago, where like in South Africa the process of mainstreaming (how best to get non-environment sector decision-makers to take up project results was carefully considered and strategised). Sustainability is also considered high at national level in Vietnam where the concept of ecosystem serves has importantly been taken up by the Ministry of Planning and Investment and there is considerable interest in expanding the pilot work on natural capital accounting undertaken through the project.

10. Institutional sustainability is considered good as the key partners are well-established and stable, and some of the networks created through the project, e.g. in South Africa, should help sustainability of project results through strengthening institutional sustainability. However, some of the targets for ProEcoServ mainstreaming work still lack sufficient capacity, such as Central Statistics Office in Trinidad and Tobago, to be able to effectively use the project results. Institutional capacity is considered most acute at San Pedro de Atacama in Chile. In addition, changes in government in Chile and Trinidad and Tobago have negatively impacted institutional sustainability and present a risk in all countries in the future. (See also recommendations 3 and 4 concerning sustainability in the main report.)

Catalytic role and replication:

11. There has been some very good catalysis of project results, with new projects catalysed at San Pedro de Atacama in Chile, Trinidad and Tobago and Vietnam, with many examples of catalysis in South Africa, especially notable being an important collaboration with the insurance sector in the Eden District pilot. Examples of direct replication include a new study on the importance of ecological infrastructure in an urban context for the City of Cape Town, based on the same co-development of data layers and approaches pioneered in the Eden District, and mapping tools developed at Ca Mau have been replicated in a study undertaken by World Wildlife Fund for Nature (WWF) in another region of the Mekong Delta region of Viet Nam.

12. There has been limited direct evidence of catalysis or replication at the global level, although most of the approaches and tools (GIS mapping, economic valuation, etc) are well tested so this is not surprising. The project is considered a precursor of a specific programme under the 6th funding cycle of the Global Environment Facililty (GEF-6 programme 10: 'Integration of Biodiversity and Ecosystem Services in to Development Finance and Planning'), and is referenced in a May 2015 report by the Global Environment Facility.

E. Efficiency:

13. The project built on a collaboration between well-established partners with extensive networks and connections with national government in the four countries (less so Chile), multiple lessons from several previous and active initiatives focused on ecosystem services issues (with existing data sets, except Trinidad and Tobago) and tried and tested approaches and tools, e.g. InVEST ecosystem service mapping tool. These helped to keep project start-up and running costs low, and presented additional opportunities to raise awareness and promote the mainstreaming of the project results more widely. The proximity of Implementing and Executing Agency staff at to each other and Financial Management Officers in Nairobi improved efficiency of project administration and communication. However, there were significant delays

at beginning of the project (in part because of a complicated, inefficient project design) which required two no cost extensions and meant the project was delivered approximately 20 months later than the expected start date (September 2009).

F. Factors affecting project performance:

14. The project has suffered from a confused causal logic and weak design, which made it difficult for project participants to understand, and a focus on activities and outputs rather than outcomes. Project preparation was generally well organized although there was some debate over who should be the executing body and allocation of financial resources between Nairobi and the pilot countries. Unfortunately, project partners were 'locked in' to delivery of all activities until project was revised at Mid-term Evaluation stage, but some countries still continued to struggle with the workload afterwards, notably Trinidad and Tobago which decided to retain most of their activities after the Mid-term Evaluation (see also recommendation 5 in the main report). There was no capacity assessment of partners undertaken at project design stage, even though it was recognised that there were major difference in capacity (including understanding of ecosystem services) between countries (South Africa high, Vietnam low), which impacted delivery of the project (Trinidad and Tobago used PhD students to try to overcome some of their capacity constraints with mixed success). (See also recommendation 6 in the main report.) Ownership was generally very good (facilitated through a participatory co-production approach in Chile, South Africa and to a lesser extent in Trinidad and Tobago) but the Natural Capital Accounting element of the project had a mixed ownership by participating countries (Trinidad and Tobago only, whereas Vietnam had an interest but no GEF funds were employed apparently) as it was added in after the initial project design stage (it is not included in the project document) and was later promoted by UN Environment.

15. Project execution arrangements were generally clear (identified in the Project Document) with separate partners with well-defined roles and responsibilities in relation to project management. The project delivery (outputs) has been generally well managed and administered by the Ecosystems Services and Economics Unit in Nairobi although there have been issues over late delivery from some countries (namely Trinidad and Tobago). Originally, at the design stage the Implementing Agency was to be UN Environment's Division of Global Environment Facility, but this was dissolved around the time the project started and as a result both the Implementing and Executing Agency responsibilities fell within the same Division in UN Environment (Division of Environmental Policy Implementation). Concerns were raised about this unusual arrangement as there was the potential for conflicts of interest to arise. However, the Terminal Evaluation found no consistent evidence of significant or recurring problems or conflicts due to this arrangement of implementing/executing agency, and indeed conflicting views within UN Environment on this matter. The single biggest problem relating to financial management was long delays on payments to partners, largely due to the introduction of a new UN Enterprise Resource Planning system (called Umoja) in 2015.

16. Project communication and coordination in Chile and Vietnam presented challenges due to the large distance from the executing partner's base (La Serena for CEAZA, and Hanoi for ISPONRE), but Chile located a team at San Pedro de Atacama following the a change in the project management team, which hugely increased efficiency, delivery and impact of the project among the local communities. The low budgets for project management were a challenge for most countries, particularly in Trinidad and Tobago, and staff invested a lot of their own time in the project. A high turnover of key personnel at UN Environment Headquarters did not help with project delivery or relationships with some partners. As mentioned above, there was also some criticism of the role and value of UN Environment as an Executing Agency for this project, given the costs involved.

17. There was a good engagement of partners and stakeholders, although involvement of the private sector and non-environment ministries, e.g. economics, finance was rather limited in most countries. Very good partnerships developed with local communities in Trinidad and Tobago and Chile, and in case of the

latter the project provided an arena ('a neutral space') to discuss wider issues and reduce conflict. However, there was rather mixed success collaborating with other relevant projects at global level, e.g. other GEF projects promoting ecosystem services, and surprisingly poor awareness of ProEcoServ within UN Environment, compared with other UN Environment projects, e.g. The Economics of Ecosystems and Biodiversity (TEEB) project, and the project is not as well known internationally as expected, despite being promoted as a UN Environment 'flagship project'. (See also recommendation 7 in the main report.)

18. The project's communication products were generally high quality with all countries producing some very good outreach material (South Africa generally and Trinidad and Tobago's website stand out), with over 90 publications and many presentations given by staff at national and international forums over the project's lifetime. The project's communication and public awareness raising activities were considered reasonably effective; the level of knowledge of the value of ecosystem services and decision-making systems has certainly increased. There were some particularly interesting approaches from South Africa with an 'ecological infrastructure' message having significant traction among groups not usually targeted by conservationists, and offering possibilities for replication in other countries. Careful, targeted use of ecosystem services maps and statistics developed or employed by the project had particularly powerful impacts as well as presenting material in 'infographic' form. Translating the technical language of ecosystem services was an important aspect of the work in all four countries, but especially Chile and South Africa and generated some important experiences and lessons (although these have still not been fully captured by the project in the evaluation's opinion).

19. The project's monitoring and evaluation system followed UN Environment's standard monitoring and evaluation procedure, although it suffered from a poor design, e.g. many non-SMART (Specific, Measurable, Attainable, Relevant & Time-bound) indicators, with no indicator for globally important biodiversity and no socio-economic indicators that would be of relevance to the economic or development communities. Reporting requirements were largely fulfilled throughout the project. An unusual Synthesis Report was chosen to present final project results, rather than a standard final project report. There were some good lessons captured by individual countries in their national reports, especially by South Africa and Trinidad and Tobago, but the project would possibly benefit from a separate more intensive and group lesson-learning exercise to draw out common lessons learned perhaps in partnership with other UN Environment and GEF project addressing ecosystem services. The Mid-Term Evaluation was delayed by 17 months, and there were very serious issues with the organization, delivery and budget for the Terminal Evaluation, which was repeatedly delayed and created significant problems in terms of arranging interviews and carrying out field missions. (see also recommendation 8 in the main report.)

20. Given the above, overall, the Project was rated as **Satisfactory**.

Summary of Evaluation Ratings

Criterion	Overall Rating
A. Strategic relevance	Highly Satisfactory
B. Achievement of outputs	Satisfactory
C. Effectiveness: Attainment of objectives and planned results	Satisfactory
1. Achievement of direct outcomes as defined in the reconstructed TOC	Satisfactory
2. Likelihood of impact using ROtI approach	Moderately Likely
3. Achievement of formal project objectives as presented in the Project Document.	Moderately Satisfactory
D. Sustainability and replication	Moderately Likely
1. Socio-political sustainability	Moderately Likely
2. Financial resources	Moderately Likely
3. Institutional framework	Moderately Likely
4. Environmental sustainability	Moderately Likely
5. Catalytic role and replication	Highly Satisfactory
E. Efficiency	Moderately Satisfactory
F. Factors affecting project performance	
1. Preparation and readiness	Moderately Satisfactory
2. Project implementation and management	Moderately Satisfactory
3. Stakeholders participation, cooperation and partnerships	Satisfactory
4. Communication and public awareness	Satisfactory
5. Country ownership and driven-ness	Moderately Satisfactory
6. Financial planning and management	Satisfactory
7. Supervision, guidance and technical backstopping	Moderately Satisfactory
8. Monitoring and evaluation	Moderately Satisfactory
i. M&E design	Moderately Satisfactory
ii. M&E plan implementation	Moderately Satisfactory
Overall project rating	Satisfactory

S=satisfactory; MS=moderately satisfactory; MU=moderately unsatisfactory; With respect to Sustainability: ML=Moderately Unlikely

The recommendations and lessons are presented in the main evaluation report (in section 4.2).

1 INTRODUCTION

1.1 Subject and scope of the evaluation

21. In line with the UN Environment Evaluation Policy[2], the UNEP Evaluation Manual[3] and the Guidelines for GEF Agencies in Conducting Terminal Evaluations[4], the Terminal Evaluation (TE) of the '*Project for Ecosystem Services – ProEcoServ*' (hereafter ProEcoServ or 'the project') was undertaken to assess project performance (in terms of relevance, effectiveness and efficiency), and determine the degree of achievement and/or likelihood of results, outcomes and impacts (actual and potential) stemming from the project, including their sustainability.

1.2 Evaluation objectives

22. The TE aimed to: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback and knowledge sharing and lessons learned among UNEP, the GEF and the executing partners (global and national levels) and other relevant project partners, principally the Center for Advanced Studies on Arid Zones (CEAZA) in Chile, the Council for Scientific and Industrial Research (CSIR) in South Africa (and for Lesotho), the University of the West Indies (UWI) in Trinidad and Tobago; and the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) in (Vietnam), and other relevant and interested stakeholders. In doing so, the TE aimed to identify lessons of operational relevance for future project formulation and implementation.

23. The TE assessed the project with respect to a minimum set of evaluation criteria grouped into four categories (see below), according to the respective evaluation guidelines of GEF and UN Environment (see above). All evaluation criteria were rated on a six-point scale, except for complementarity of the project with the UNEP strategies and programmes which was not rated.

i. **Attainment of objectives and planned results**. This comprises an assessment of the achievement of the Project's objectives, outcomes and outputs and the project's relevance, effectiveness and efficiency. Given the project's expected long-term impacts, a Review of Outcomes to Impacts (ROtI) method was applied to identify whether or not the necessary preconditions, factors and elements needed to support achievement of long-term impacts have been put in place.

ii. **Sustainability[5] and catalytic role**. This focuses on the (i) socio-political, (ii) financial, (iii) institutional and (iv) environmental factors affecting the sustainability of project outcomes and results, and also assesses efforts and achievements in terms of replication and up-scaling of project lessons and good practices.

iii. **Processes affecting attainment of project results**. This covers: (i) project preparation and readiness, (ii) implementation approach and management, (iii) stakeholder participation and public awareness, (iv) country ownership/driven-ness, (v) financial planning and management, (vi) UNEP supervision and backstopping, and (vii) monitoring and evaluation (M&E).

iv. **Relevance, including complementarity with the UNEP strategies and programmes**. To the extent that each of the following was appropriate, the TE also presents a brief narrative on: (i) how the project

[2] http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx

[3] http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx

[4] http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf

[5] In the context of the TE, sustainability is understood as the likelihood of continued benefits after the project ends.

relates to and links with UNEP's Medium Term Strategy 2010-2013; (ii) how the project aligns with the Bali Strategic Plan (BSP); (iii) the extent to which the project considers gender in its design, implementation, and monitoring activities; (iv) examples of South-South Cooperation that the project engaged in, as well as (v) the extent to which the project contributed to the realisation of international gender equality norms and agreements (as reflected in the UNEP Gender Policy and Strategy), as well as strategies to advance Human Rights.

1.3 Evaluation approach and methodology

24. The TE was conducted by an independent consultant with expertise in natural resource management, ecosystem services assessment and PES schemes, institutional capacity building, and project management and Monitoring and Evaluation (M&E, including UN and GEF project experience – see Annex 11), under the overall responsibility and management of the UNEP Evaluation Office (EO), in consultation with the UNEP GEF Coordination Office and the UNEP Task Manager at UNEP (all based in Nairobi). The TE employed a participatory approach whereby key stakeholders were kept informed and consulted throughout the evaluation process.

25. After some months of administrative delays (see paragraph 437 onwards), the TE eventually began on 10 December 2015 and was completed in June 2016. The initial timing of the TE was scheduled to coincide with the final operational and financial planning activities to conclude and close the project.

26. The TE was undertaken as a mix of desk reviews, in-depth interviews (face-to-face, by Skype or telephone) with UNEP staff within the GEF Coordination Unit, the UNEP/DEPI-Ecosystem Services Economics (ESE) Unit and other relevant UNEP staff, project staff from the four national executing bodies (CEAZA, CSIR, UWI and ISPONRE), representatives from project partners, as well as other selected global, national and local level individuals and groups, including national and local government authorities and agencies, academics and those involved in activities at the pilot sites in Chile, South Africa, Trinidad and Tobago and Vietnam. Information was triangulated (i.e. verified from different sources) to the extent possible. When verification was not possible, the single source is mentioned.

27. The international consultant undertook field missions to Trinidad and Tobago (14-21 January 2016) and Chile (13-23 March 2016) to interview key stakeholders and individuals and to ground truth results reported from the field. Details of these missions are given in Annex 2. Unfortunately, there were insufficient funds to visit South Africa and Vietnam so interviews were conducted with stakeholders and project partners in these countries by Skype and telephone apart from one face-to-face meeting with the Project Coordinator for South Africa which took place in November 2015 when she was visiting London to attend a conference. A visit to UNEP HQ in Nairobi was also undertaken (29 February – 4 March 2016) to interview many of the UNEP staff involved in the delivery the ProEcoServ project and the fact that the project was executed internally under an arrangement where both the GEF Executing and Implementing Agencies were within the same UNEP Division (DEPI), and thus had similar reporting lines (same Divisional Director), and the previous Project Manager became a UNEP GEF Task Manager with responsibility for the ProEcoServ project.

28. It was not possible to interview every possible stakeholder group and individual face-to-face due to financial and time constraints, and so a representative sample was interviewed. All the major groups were included although interviews with project participants in Vietnam were limited to the national level as it was not possible to arrange an interview with the local (Ca Mau) and provincial stakeholders by Skype due to poor connections and the lack of a local interpreter (no project resources were available to pay for one or to pay for key provincial individuals to fly to Hanoi to hold interviews from the ISPONRE office). Consequently, the TE's analysis of the project results in Vietnam is considered the weakest of the four countries. It was also not possible to secure interviews with some individuals at the global level as they

were unavailable during the evaluation period. Efforts were made to include as many women among the interviewees as possible, and the TE believes they were well represented in the evaluation.

29. The full list of interviewees is given in Annex 3 and the key documents reviewed in Annex 4.

1.4 Main evaluation criteria and questions

30. An evaluation matrix listing broad categories of areas to be addressed and key sample questions to be asked during the interview process was produced as part of an internal inception report (available from the EO upon request). The questions in the evaluation matrix served as guides in directing the semi-structured interviews (not as a formal questionnaire) and only questions relevant to each stakeholder were asked.

31. Following agreement with the UNEP EO on aims and methodology, the TE focused on the following sets of key questions, based on the project's intended outcomes, to assess project performance and determine outcomes and impacts, and evaluate likely sustainability[6]:

a. To what extent has the project contributed to the reduction of threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision-making? What is the likely expected impact of the project in this context?

b. To what extent has the project contributed to the integration of ecosystems assessment, scenario development and economic valuation of ecosystem services into national sustainable development planning?

c. To what extent has the project supported the strengthening of capacities and technical advisory services that will allow analysis of how policy decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors?

d. To what extent has the project increased the policy relevance of ecosystem services sciences' results in international BD and ES-related processes?

e. To what extent has the project implemented the recommendations of the MTE? How effective were the revisions in the logframe to adjust the focus of the project and to guide management decisions?

f. What were the strengths, weaknesses, advantages and disadvantages of the project's execution and oversight arrangements, given both the implementing and executing bodies were housed within the same UNEP Division? Did this arrangement create any conflicts or issues with delivery? Was the separation between the implementing and executing groups sufficient? How should internally executed projects be managed by UNEP in future?

32. In addition, as this is a TE, particular attention was given to learning from the project's experiences. Therefore, the TE sought to go beyond the assessment of "*what*" the project performance was, to provide a deeper analysis of "*why*" the performance was as it was, i.e. an assessment of influences affecting attainment of project results in order to provide the basis for the lessons that can be drawn from the project.

[6] For GEF projects sustainability is understood as the probability of project-derived results and impacts continuing over the longer term after project funding and assistance has ended. The TE examined sustainability of the project from the point of view of four parameters: socio-political, financial, institutional and environmental.

2 PROJECT BACKGROUND

2.1 Project context and development

33. The GEF-supported Millennium Ecosystem Assessment (MA), published in 2005, concluded that more than 60% of the world's ecosystem services (ES) are either degraded or used unsustainably. Particularly affected are regulating ecosystem services, such as air quality regulation, climate regulation at regional and local levels, erosion regulation, water purification, waste absorption, and natural hazard regulation. Such degradation was considered a significant barrier to achieving the Millennium Development Goals (and also applies to the recently agreed Sustainable Development Goals).

34. Independent evaluations of the MA have concluded that its emphasis on ecosystem services has helped clarify the connections between environment and development, and the linkage between biodiversity conservation and poverty alleviation in particular. However, despite the MA's strength as a scientific and technically sound assessment there is little evidence that the MA findings have made a significant impact on policy formulation and decision-making, especially in developing countries and among non-environment sectors. This has been linked to:

- A generally rather weak focus on sub-global assessments and the local level within the MA;
- A very limited involvement of national and local stakeholders that ultimately make the decisions affecting biodiversity and ecosystem management and act upon these; and
- A lack of relevant practical tools, models and methods that can be readily understood and used by decision-makers (especially non-environment sectors).

35. Many Sub-Global Assessments (SGA) have been undertaken in the wake of the MA, particularly at sub-national but also at regional levels. A survey of SGAs for the Convention of Biological Diversity (CBD) Secretariat found an increased involvement of, and impact on, decision makers through ongoing SGAs[7]. However, there were still significant challenges related to:

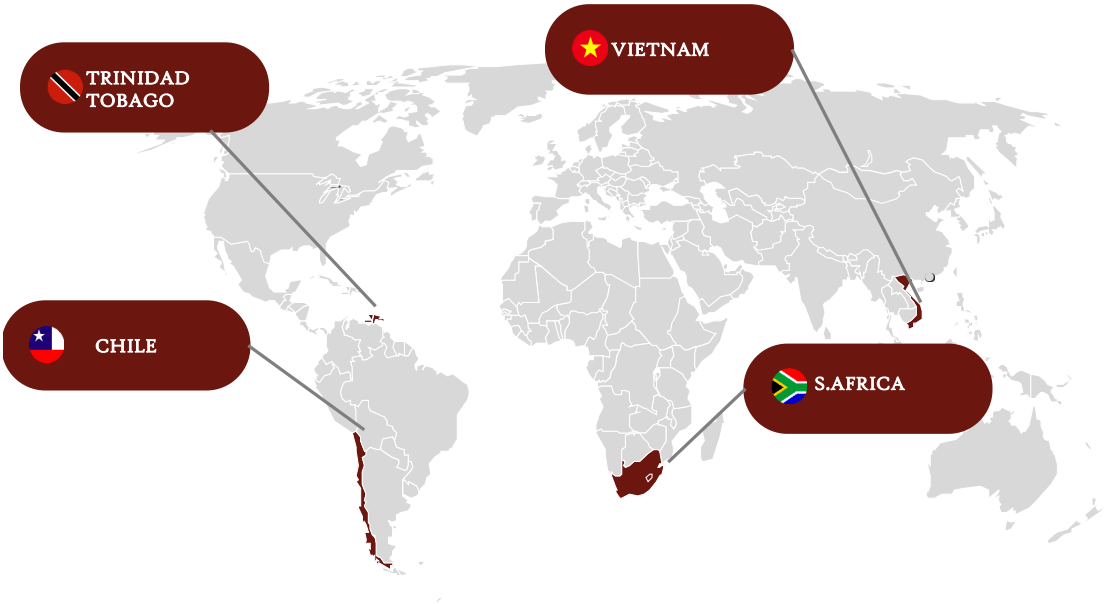
- Lack of data to establish baselines and to develop tools, models, valuation of ecosystem services or indicators;
- Low capacity at local levels to carry out assessments of ecosystem services;
- Weak institutional and governance arrangements to integrate the assessment results and recommendations into policy making; and
- Weak market incentives and regulations to support establishment and scaling up of payments for environmental services and other innovative financing mechanisms.

36. ProEcoServ aimed to address some of the barriers and challenges identified above through a closer focus on national- and local-level assessments, the development and introduction of approaches, tools, models and methods to support decision makers to mainstream ecosystem services into development policies, with strengthened involvement of national and local stakeholders. The project aimed to produce information on the linkages and potential trade-offs between the preservation of ecosystem services and development processes and to pilot the bundling of ecosystem services and integration of ecosystem service approaches in resource management and decision making within four countries – Chile, South Africa, Trinidad and Tobago and Vietnam (originally five with Lesotho treated as a separate country but its status and activities were later revised – see paragraph 63). Thus the project aimed to provide better insight into the importance of key ecosystem services and how to protect and utilize them sustainably.

[7] See UNEP/CBD/COP/9/INF/30.

37. ProEcoServ was a four and a half-year initiative (2010 – 2015), which was funded by the Global Environment Facility (GEF), and led by the United Nations Environment Programme (UNEP). The four pilot countries (Figure 1) were selected because of their previous work on SGAs and built on these or site-specific assessments (therefore existing data upon which the project could build), the country's demonstrated interest to implement the project, and complementarity of the project's aims and activities with national priorities and policies.

Figure 1 ProEcoServ pilot countries



2.2 Project Objectives and Components

38. The Project's **overall development goal**, as stated in the Project Document (ProDoc), is to 'utilise ecosystem assessment and economic valuation to better integrate ecosystem services into poverty reduction and sustainable development planning.' The **project objective** is to 'reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making'.

39. The project aimed to develop capacities of decision makers, users and beneficiaries of ecosystem services through promotion of a set of ecosystem management tools and approaches within sectoral planning frameworks and macroeconomic planning models to assess trade-offs and development choices that could help strengthen biodiversity and ecosystem resilience at a range of scales. Another major aim was to identify and disseminate lessons learned that could be applied to other countries and at the global level.

40. A range of ecosystems were targeted - grasslands, drylands/montane, terrestrial forests and mangroves and coastal marine ecosystems over a variety of scales ranging from site, catchment, provincial to national levels.

41. The project comprised four Components: (1) development of policy support tools; (2) strengthening of the policy environment (support for implementation of policies); and (3) bridging the science-policy interface; with an additional component (4) covering project management.

Component 1 - Support Tools for Policy Making

42. This Component included the development of multi-scale decision-support models and tools to enable decision-makers, principally at national and sub-national levels, to analyse interconnected ecosystem services and drivers of ecosystem change, and to apply this knowledge in development planning and policy making. Activities under this Component comprised (among other things): the mapping of ecosystem services; development of trade-off matrices that laid out development choices and their potential costs or benefits for ecosystems; and scenario development to illustrate the potential impact of different plausible futures and improve understanding of risks and threats to resilience. Local stakeholders were to be particularly involved in activities under this Component.

43. One rather separate sub-component that only applied to Trinidad and Tobago was an examination of the potential for innovative markets for the '*development of new financial mechanisms for 'non-carbon' ecosystem services*' (note the term 'non-carbon'). However, it has never been very clear how this very specific sub-component was related to other elements of the project. According to the ProDoc, it was to include analysis of opportunities and barriers to establishing payment for ecosystem services (PES) approaches, conceptual frameworks to support the establishment of markets for ecosystem services (presumably non-carbon only) at appropriate scale, institutional and regulatory mechanisms, and reforms and incentives in support of such markets. However, rather strangely, the results of this analysis was intended to '*improve understanding in international fora*' (so not national or local) of the potential of such mechanisms, which relates more to Component 3 which focuses on the international level. In other words, the formulation and targeting of this sub-component was rather confused.

Component 2 - Assistance for Policy Implementation

44. The aim of Component 2 was to influence public policy and programmes at the national and transboundary as well as regional levels, with a focus on supporting the policy environment and policy implementation with regard to application of ecosystem services approaches and management. Associated with this was the need to determine relevant legal and regulatory instruments and associated barriers to implementation. At the operational level, this was to include: spatial based ecosystem planning frameworks mapped onto macroeconomic sectoral planning models; estimations of the response of targeted ecosystem services to increasing levels of degradation; and trade-offs between ecosystem services flows (e.g. provisioning versus regulating services), with identification of 'entry points' in decision-making processes, e.g. review of annual budgetary allocations by governments and development assistance programmes by donors, through which relevant ecosystem services information and tools could be mainstreamed.

45. It was recognised that information on the value of ES, tradeoffs, etc, and ways to address the above challenges needed to be provided in understandable and useable forms to decision makers and made relevant to their work (e.g. for economists set in terms of income, employment, fiscal savings, etc). Consequently, awareness-raising, outreach and dissemination were considered important elements of this component, and each of the four countries developed and executed their own Communication Strategy on ecosystem services under this component targeted at national decision makers and other relevant stakeholders.

Component 3 - Bridge between Science and Policy

46. The aim of Component 3 was to 'strengthen the science-policy interface for ecosystem-conscious policy making at the international level', as well as helping to bridge the gap between science and policy in developing countries. These were to be achieved by generating and disseminating project tools,

information and other results including case studies and identification of 'best practice'[8], and facilitating a linkage between the project's results at local, sub-national, national and transboundary levels and within the international agenda setting arena. This component envisaged substantial 'vertical and horizontal information exchange' on ecosystem sciences tools and experiences of relevance to policy making. Component 3 was intended to capture lessons on how to best to integrate ecosystem service tools into policy and decision-making and contribute to the longer-term strategic goal of mainstreaming biodiversity conservation and ecosystem services approaches into sustainable development planning. Operationally, Component 3 was to include:

- Exchanges between the national teams under the project, through site visits, joint tool development, data and experience exchange, joint workshops and seminars;
- The engagement of ProEcoServ practitioners (particularly project staff) with other international experts in the area of ecosystem services, so as to increase mutual learning and knowledge exchange on implementation challenges and opportunities for ES mainstreaming; and,
- The participation of project staff in international fora dealing with the science of ecosystem services, in order to promote tools and knowledge generated through ProEcoServ experiences.

[8] The term 'best practice' is used throughout the ProDoc but in the evaluation's opinion it is perhaps better worded 'good practice' or 'effective practice' as there have been no comparative studies which have examined the effectiveness of one tool or approach relative to another. Rather the project has produced 'case studies' (or 'use cases' as termed by the South Africans) with detail on the challenges, solutions and experiences which are valuable for lesson learning and certainly a contribution to the growing literature on the subject of ecosystem services and their mainstreaming into policy and management decision-making.

Table 1. Project components, expected outcomes and outputs (source Project Document and TE Terms of Reference)

Project Objective: Reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making			
Components	**Outcomes**	**Outputs (from original logframe)**	**Output Revised**[9]
1.Policy Support Tools	1.1 Decision- and policy-makers have access to strengthened capacity and technical advisory services to analyse how their policy decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors.	1.1.1 Spatial mapping of ecosystem services. 1.1.2 Estimation of supply response functions for selected bundles of ecosystem services. 1.1.3 Trade-off matrices produced across ecosystem services, and competing natural resource uses and human well-being. 1.1.4 GIS-based valuation of ecosystem services at sub-national levels, chiefly for regulating services. 1.1.5 Decision support systems to guide decision makers on choosing development strategies which ensure sustainable flow of selected bundle of ecosystem services. 1.1.6 Provision and dissemination of practical tools, guidelines, indicators and information for decision makers at various levels of the pilot countries. 1.1.7 Development of scenario planning as a decision support tool for understanding risk, uncertainty and building resilience. 1.1.8 Scenarios produced for the bundle of ecosystem services under different plausible futures. 1.1.9 Participation of local	***Outputs/milestones for Chile*** 1.1.1 Spatial mapping of ecosystem services in the pilot areas. 1.1.2 Development of qualitative and quantitative models for ecotourism and water 1.1.3 Trade-off matrices produced across ecosystem services, and competing natural resource uses and human well-being. 1.1.4 GIS-based valuation of ecosystem services at communal levels, focusing in water provision and ecotourism as ES 1.1.5 Decision support systems to guide decision makers on choosing development strategies which ensure sustainable flow of selected bundle of ecosystem services. 1.1.6 Provision and dissemination of practical tools, guidelines, indicators and information for decision makers at various levels of the pilot countries. 1.1.7 Development of scenario planning with participation of local stakeholders as a decision support tool for understanding risk, uncertainty and building resilience. ***Outputs/milestones for South Africa*** 1.1.1 Spatial mapping of ecosystem services 1.1.3 Policy relevant benefits and beneficiaries identified across ecosystem services, and used to explore natural resource management and human well-being 1.1.4. GIS-based valuation of regulating ecosystem services at a national level 1.1.5. Ecosystem services are piloted in existing decision support tools to guide decision makers in choosing sustainable development strategies 1.1.7 Piloting of risk assessment for incorporating ecosystem services into risk management 1.1.8. Risk models produced for the set of ecosystem services under different plausible futures 1.1.9. Participation of local stakeholder groups in piloting risk assessment 1.1.10 Determination of local and transboundary benefits of restoring ecological infrastructure in the catchments of Lesotho

[9] Revised logframe 18 November 2013

	1.2 Improved understanding in international fora of the potential for the development of new financial mechanisms for "non-carbon" ecosystem services	stakeholder groups in piloting scenario planning. 1.2.1 Scoping for innovative international markets for "non-carbon" ecosystem services	***Outputs/milestones for Trinidad and Tobago*** 1.1.1: Spatial mapping of ecosystem services 1.1.2: Estimation of supply response functions for selected bundles of ecosystem services 1.1.3: Trade-off matrices produced across ecosystem services, and competing natural resource uses and human well-being 1.1.4: GIS-based valuation of ecosystem services at sub-national levels, chiefly for regulating services 1.1.5: Decision support tools to guide decision makers on choosing development strategies, which ensure sustainable flow of selected bundles of ecosystem services 1.1.6: Provision and dissemination of practical tools, guidelines, indicators and information for decision makers at various levels of the pilot countries 1.1.8: Scenarios produced for the bundle of ecosystem services under different plausible futures 1.1.9: Participation of local stakeholder groups in piloting scenario planning 1.2.1: Scoping for innovative international markets for "non-carbon" ecosystem services ***Outputs/milestones for Vietnam*** 1.1.1: Spatial maps developed 1.1.2: Estimation of Supply and response functions of selected bundles of ES 1.1.3: GIS-based valuation of ES, chiefly for regulating services conducted 1.1.4: Locally accepted Scenarios produced for selected bundles of ES and used as a decision support tool.
2. Policy environment	2.1 Increased awareness, understanding and level of involvement of targeted stakeholders (i.e. government authorities, private sector, ecosystem service users) in the integration of ecosystem services management considerations into policy making processes in the pilot	2.1.1 A systematic outreach and dissemination strategy on ecosystem services developed and executed in the four participating countries 2.1.2 An ecosystem services strategy developed for selected SMEs. 2.1.3 Partnerships built for public-private cooperation for ecosystem management	***Outputs/milestones for Chile*** 2.1.1 A systematic outreach and dissemination strategy on ecosystem services developed and executed 2.1.2 An ecosystem services strategy developed for selected SMEs. 2.1.3 Partnerships for public-private cooperation for ecosystem management showcased 2.2.1 Opportunities and gaps identified in existing legal and regulatory instruments to accommodate ecosystem services 2.2.2 Promotion of equitable and pro-poor economic and financial incentives for sustaining ecosystem services 2.2.4 Pilot studies conducted on investment in ecological infrastructure to ensure an accepted minimum and sustainable flow of selected ecosystem services. ***Outputs/milestones for South Africa and Lesotho*** 2.1.1: A systematic outreach and dissemination strategy on ecosystem services developed and executed

	countries 2.2 Ecosystem services are integrated into socio-economic, legal and policy instruments	2.2.1 Opportunities and gaps identified in existing legal and regulatory instruments to accommodate ecosystem services (baseline to be established) 2.2.2 Promotion of equitable and pro-poor economic, regulatory and financial incentives for sustaining ecosystem services 2.2.3 Ecosystem services maps and valuation used to inform macroeconomic and sectoral planning 2.2.4 Pilot studies conducted on investment in ecological infrastructure to ensure an accepted minimum and sustainable flow of selected ecosystem services.	2.1.3 Partnerships for public-private cooperation for ecosystem management showcased 2.2.1 Ecosystem service maps and tools used to inform policy and sectoral planning 2.2.2 Promotion of equitable and pro-poor investment in sustaining ecosystem services 2.2.4 Sustainable use of water resources through mainstreaming concepts of ecological infrastructure into water resource planning ***Outputs/milestones for Trinidad and Tobago*** 2.1.1 A systematic outreach and dissemination strategy on ecosystem services developed and executed 2.1.3 Partnerships for public-private cooperation for ecosystem management showcased 2.2.1 Opportunities and gaps identified in existing legal and regulatory instruments to accommodate ecosystem services 2.2.2 Promotion of equitable and pro-poor economic and financial incentives for sustaining ecosystem services 2.2.3 Ecosystem services maps and valuation used to inform macroeconomic and sectoral planning 2.2.4 Pilot studies conducted on investment in ecological infrastructure to ensure an accepted minimum and sustainable flow of selected ecosystem services ***Outputs/milestones for Vietnam*** 2.1.1: A systematic outreach and dissemination strategy on ecosystem services and tools developed and executed at both national and local level 2.2.2: Equitable pro-poor economic, regulatory and financial incentives promoted for sustaining ES 2.2.3: Ecosystem services value maps and valuation used to inform macroeconomic and sectoral planning 2.2.4: Pilot studies on investment in ecological infrastructure conducted to ensure an acceptable minimum and sustainable flow of ES
3. Science policy interface	3.1 Increased policy relevance of ecosystem services sciences' results in international BD and ES-related processes	3.1.1 Horizontal and vertical information exchange established on ES sciences, tools and policy processes 3.1.2 Outreach strategy developed to engage with policy platforms on ecosystem services (e.g. BD-related MEA COPs, IPBES, IHDP, GLOBE, TEEB)	Unchanged by MTE

47. Ecosystem services tools, experiences and 'best practice' findings gathered from project results were to be promoted through creating linkages with existing clearing-house and knowledge management systems, as well as close interaction with international policy platforms[10]. It was also anticipated that interactions at the global level would prepare the ground for possible replication and up-scaling of the project's approach, tools and experiences to other countries. Consequently, the implementation of a separate global-level communication and engagement strategy was considered a core activity under this Component. This aimed to identify pathways and opportunities to inform and influence international policy making with regard to biodiversity and ecosystem services and help align the development of policy briefs, information materials and the sharing of lessons learned generated by the project with the relevant international processes. However, it was not entirely clear how these communication activities under Component 3 were to align with the project's four national communication strategies/plans to be delivered under Component 2 (see sections 3.2.5 and 3.6.4).

Component 4 – Project management

48. This component focused on the Project's management structure and activities.

49. The project's full logical framework is presented in Annex 5. A simplified listing of just the project's components and associated outcomes and outputs is presented in Table 1 above. This follows the latest, updated version of the logframe which was approved by the project's global Project Steering Committee (PSC) after the second PSC meeting following recommendations by the Mid Term Evaluation (MTE).

2.2 Target areas/groups

50. The project was to focus largely on decision-makers mostly in national and sub-national level government authorities but also local stakeholder groups and communities, in the four target countries, and in the case of Chile this included indigenous communities. The private sector was less targeted and engaged (the project would have required a different approach), although there were some exceptions, notably the insurance sector at Eden in South Africa (see paragraph 133 and following paragraphs) and some limited targeting of the private sector at San Pedro de Atacama in Chile.

2.3 Implementation Arrangements

51. UNEP was the GEF-designated Implementing Agency (IA) for the project, responsible for overall project supervision to ensure consistency with GEF and UNEP policies and procedures, and was expected to provide guidance on linkages with related UNEP- and GEF-funded activities. The project fell within the category of UNEP's 'internally executed' GEF projects where the Executing Agency (EA) of the project was UNEP's Division of Environmental Policy Implementation (DEPI) - Ecosystem Services Economics (ESE) Unit, which was responsible for all aspects of project execution, including advising on strategic direction of the project. Originally, the IA role was assigned to UNEP's Division of GEF (DGEF), but this was transferred to the UNEP/DEPI/GEF BD/LD Unit[11], after structural changes within UNEP (when DGEF was dissolved) and the Unit has operated as the GEF IA, with a supervisory and oversight role since. This meant that the IA and EA functions for the ProEcoServ project were both housed within the same UNEP Division, which was an unusual arrangement.

52. The GEF BD/LD Unit formally had responsibility for participating in the project's Steering Committee (PSC) meetings, supporting external evaluations with UNEP's Evaluation Office (EO), reviewing

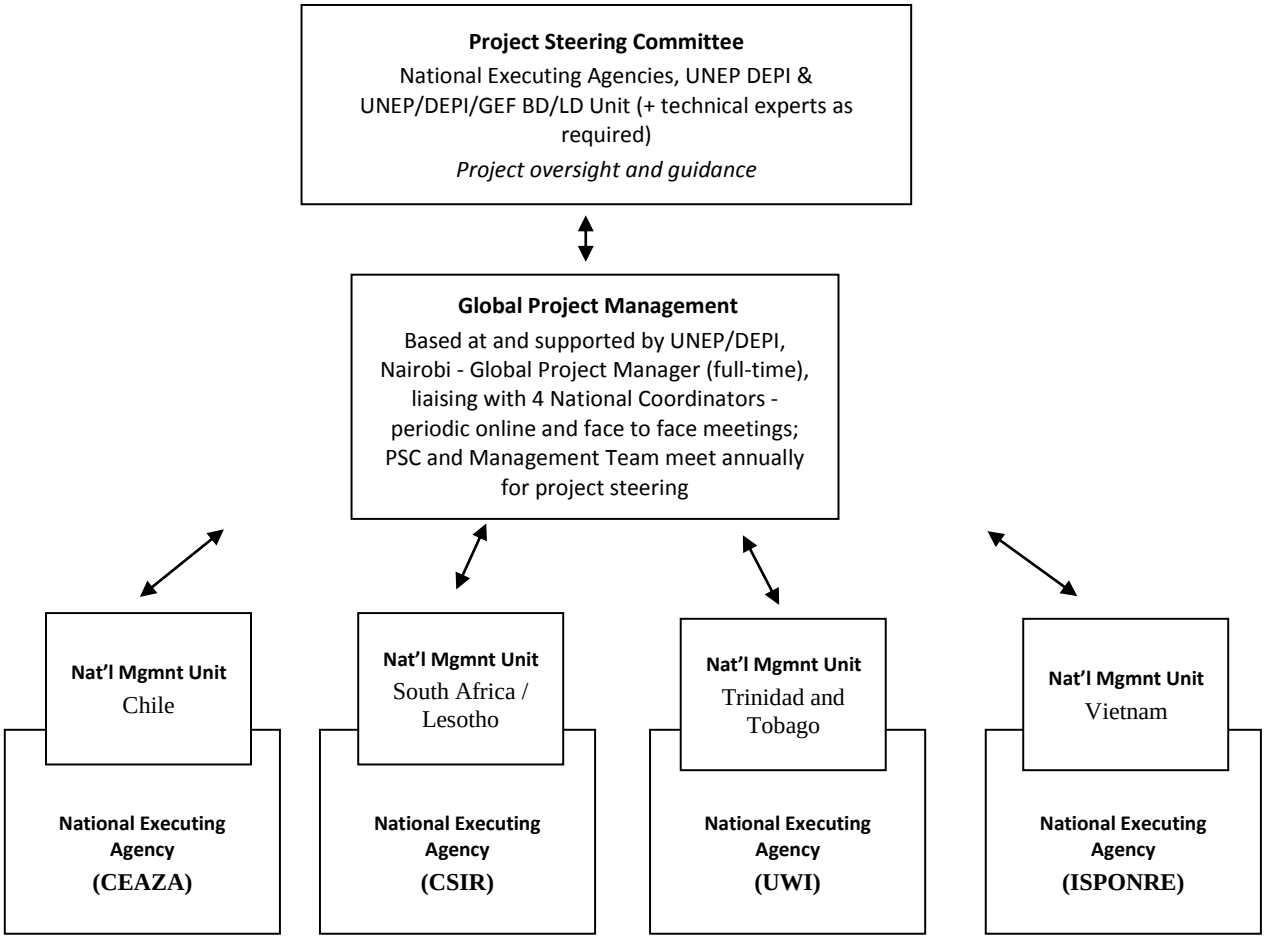
[10] The ProDoc mentions Conference of the Parties of Multilateral Environment Agreements (MEA), Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, www.ipbes.net), International Human Dimension Programme on Global Environmental Change (IHDP, www.ihdp.unu.edu), Global Legislators Organisation (GLOBE, globelegislators.org), United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD, www.un-redd.org) and The Economics of Ecosystems and Biodiversity (TEEB, www.teebweb.org)).

[11] Originally, this was to be UNEP-Division of GEF (UNEP-DGEF) but the DGEF was disbanded shortly before implementation of the project began.

and clearing semi-annual technical and financial reports and preparing the annual Project Implementation Review (PIR) reports for the GEF. The UNEP Task Manager (TM) and Financial Management Officer (FMO), (the latter housed within Operations Support Unit, under DEPI in Nairobi), provided assistance and advice to the EA on project management (e.g. revisions of work plan and budgets) and policy guidance in relation to GEF procedures, requirements and schedules, as well as having responsibility for clearance and transmission of financial and progress reports to the GEF. Another task of the UNEP/DEPI/GEF BD/LD Unit was to ensure linkage/synergies and cross-fertilisation between ProEcoServ and other similar UNEP GEF projects.

53. The project established a global Project Steering Committee (PSC) with representation from the EA and GEF IA, national executing bodies from the four pilot countries and external global experts with relevant experience in ecosystem services studies, MA sub-global assessments and economic valuation, identified through UNEP/DEPI's international network. The role of the PSC was to provide overall guidance and direction for the project, as well as approving the project's annual work plans and budgets. A global Project Management Unit (PMU), headed by the Global Project Manager (PM), which was established in the ESE Unit in Nairobi, acted as the secretariat to the PSC.

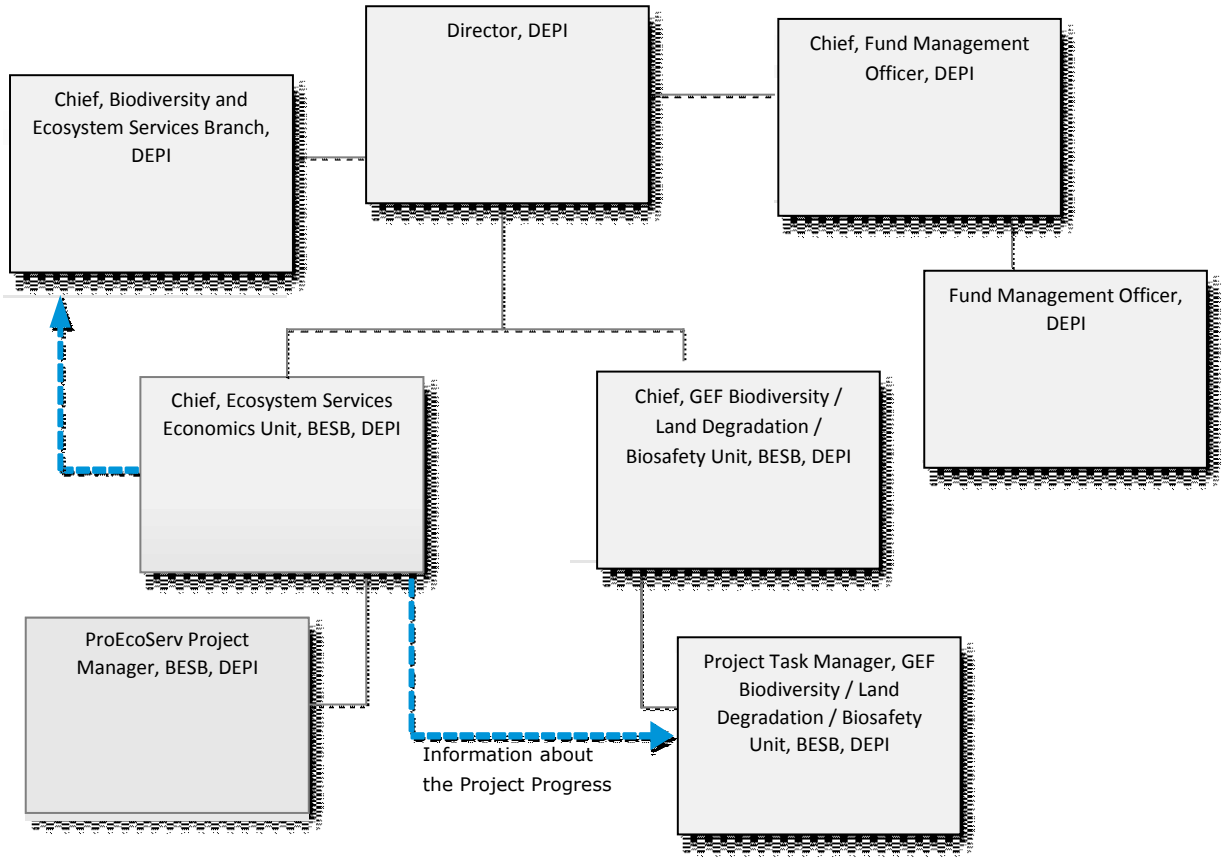
Figure 2. The Project's organizational flow



54. The national executing agencies responsible for project execution were: The Center for Advanced Studies on Arid Zones (CEAZA) at the Universidad de La Serena and Universidad Católica del Norte in Chile; the Council for Scientific and Industrial Research (CSIR) in South Africa (and for Lesotho); the University of the West Indies (UWI) (supported by the Cropper Foundation) in Trinidad and Tobago; and the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) in Vietnam. Each national executing agency hosted a National Project Coordinator and a National Project Manager responsible for in-country

project execution, management, coordination, monitoring and financial/technical reporting. Each country also established a national-level project steering committee providing oversight. The project also had the option of establishing independent technical or advisory groups (at the national or local level) to provide a peer review facility for tools, approaches and results developed and employed by the project. The project's management arrangements and reporting lines are show in Figure 2 and Figure 3.

Figure 3. ProEcoServ reporting lines for IA & EA[12]



Source: MTE Report.

2.4 Project Financing

55. At the CEO endorsement stage, GEF provided 24.3% of the overall financing to the project (US$ 6,296,637), which put the project in the Full-size Project (FSP) category. The project was expected to mobilize another US$ 19,620,551 in co-financing from the participating Governments, other UN agencies and NGOs, giving a total project budget of US$ 25,917,188. More detail on project financing and financial management is given in section 3.6.6.

2.5 Project partners

56. A well-planned, comprehensive and detailed stakeholder analysis and engagement exercise was conducted during the project design (Project Preparation Grant - PPG) phase in all the four target countries, led by Research and Resources for Sustainable Development in Chile, CSIR in South Africa/Lesotho, UWI in Trinidad and Tobago and ISPONRE in Vietnam, and global-level stakeholders identified through the UNEP ESE Unit and UNEP DGEF. This identified the major groups of stakeholders (those that would be affected

[12] Source: ProEcoServ. Mid Term Evaluation report.

either positively or negatively by the implementation of the project) that the project needed to engage during implementation of the full project[13], including environment, financial/economics, water and land management sector government agencies, international groups, including MEAs, private sector businesses with a link to key ecosystem services, e.g. tourism industry operating at San Pedro de Atacama in Chile, and UNEP. It should be noted that the Government of Chile changed its lead executing partner after the Project began with CEAZA taking over this role but representatives from CEAZA had already been involved in some of the project design and planning at the PPG stage.

57. The ProDoc sets out a 4-page stakeholder engagement plan (Section 5, pages 96-99) for project implementation, and further analysis of key stakeholders and potential roles in the project was undertaken in each participating country early on in implementation in 2012 with separate reports produced (see Annex 10).

58. Major stakeholders identified in Chile included: indigenous people (the Atacameños); mining companies; local government authorities; public agencies at the regional level (sub-national); tourism operators and entrepreneurs; and regional universities (and in the process of up-scaling the approach to other areas of Chile other stakeholders were later identified, including the ministry of economics/finance). In South Africa and Lesotho stakeholders included: national and local government authorities such as South Africa National Biodiversity Institute (SANBI), South Africa National Parks (SANParks) and Eden District Municipality officials and councilors; civil society and NGOs such as WWF-SA; academia and research institutes; and the private sector such as the wine industry, supermarket retail, mining industry, ostrich farming industry, and breweries and particularly the insurance sector. In Trinidad and Tobago stakeholders included: national and local government authorities such as Environmental Management Authority, Green Fund Unit, Ministry of Planning Housing and Environment (MPHE), and the Chief Secretaries Office and Department of Natural Resources and Environment, Tobago House of Assembly (THA); civil society and NGOs such as the Buccoo Reef Trust; academia and research institutes such as the Institute of Marine Affairs and the University of Trinidad and Tobago and UWI Environment Tobago; and intergovernmental groups such as the Association of Caribbean States. Finally in Vietnam, key stakeholder groups identified included: the Ministry of Natural Resources and Environment (MONRE); Ministry of Agriculture and Rural Development (MARD), and Ministry of Planning and Investment (MPI) and the Department of Natural Resources and Environment (DONRE); the people's committee of provinces; various research institutes/universities; and non-governmental organizations (NGO), namely the International Union for the Conservation of Nature (IUCN) and WWF.

2.6 Changes to project design and duration during implementation

59. The project's inception phase ran from October 2009 to March 2010, during which the UNEP global Project Management Unit (PMU), based at the ESE Unit at UNEP in Nairobi, was established, procurement and communication plans were elaborated. The project's work-plan was revised, and all partners were informed about the start of the project. From March 2010 to June 2011, the PMU/ESE Unit focused on the recruitment of a Global Project Manager (GPM), preparation of contracts with the pilot country institutions (development and signing of the Project Cooperation Agreements (PCAs) took significant time – (most of these were signed in early 2011) and organization of a global inception workshop, which took place in Nairobi in June 2011. During this period the country teams also selected and recruited their own national project managers and technical teams. Therefore the project did not become fully operational and fully staffed at the PMU until June 2011. Following this, up to the end of 2011, the countries held their own national inception workshops and project launch events, and the first PSC meeting was held in May 2012 in

[13] A comprehensive list of the key stakeholders for each country and their role and relevance to the project is given in a lengthy section of the ProDoc (section 2.5 pages 35-46).

Trinidad and Tobago. Thus there were significant delays – almost 22 months - before the full start up of the project (from GEF approval in August 2009 to the global inception workshop June 2011).

60. In line with the UNEP Evaluation Policy and the UNEP Evaluation Manual, a Mid Term Evaluation (MTE) was undertaken in August 2013 (originally scheduled for March 2012) to analyse whether the project was on-track, what problems or challenges the project was encountering, and what corrective actions were required. Despite the late start of the project implementation, the MTE gave project progress as Satisfactory at that stage.

61. The MTE recommended several changes to the project which were initially discussed at the 2nd PSC meeting held in May 2013 in San Pedro de Atacama (SPA), Chile, mostly relating to which specific activities individual countries should focus on in the second half of the project. The initial logframe was found to be rather too general with too many outputs that required a wide range of activities across all countries, some of which were not appropriate to particular countries, and there was poor understanding among some countries of what specifically was required. Therefore, sets of country activities were reviewed, reduced and refocused on specific outputs that were judged to be most relevant to individual countries and deliverable in the remaining time frame of the project, along with associated budget lines.

62. For instance, a strategy for small- and medium-sized enterprises (SMEs, Output 2.1.2) was still considered a priority for Chile, but the Trinidad and Tobago and Vietnam teams decided to drop this output while in South Africa the team decided to focus its efforts on promotion of pro-poor economic incentives, undertake pilot studies on investment in ecological infrastructure, and focus on the mainstreaming approaches being tested in the project as its main contribution. As a result of recommendations from the MTE, the project's logical framework (and associated budget lines) was revised to make if more consistent with the reduced number of activities and a greater focus on priority areas in each country (see section 2.14.1 on project design).

63. Along with the general delays affecting start up of the whole project mentioned above, there were additional delays in beginning the transboundary component in South Africa/Lesotho largely because of significant capacity constraints in Lesotho (mostly in relation to research and project execution needs). Therefore following the MTE it was decided to treat the project's only transboundary component separately and a transboundary water expert was engaged to develop the necessary deliverables for Lesotho but with both South African and Lesotho stakeholders involved in work, with additional training and capacity building exercises for Lesotho stakeholders. Lesotho's role in the project was clarified at the 2nd PSC meeting and a decision was taken that references to Lesotho should be downplayed and, essentially, it should be treated as a subcomponent of the South Africa work, as Lesotho did not have the same type/ level of involvement as the other pilot countries. As a result, the standard text describing the project was changed to 'ProEcoServ has four main target countries which are Chile, South Africa, Trinidad and Tobago, and Vietnam. The South Africa project includes activities in Lesotho to explore transboundary mainstreaming opportunities'[14].

64. The project was originally planned to run to 30 June 2014, but following the delays with its start-up (see above) it was granted a 12-month no-cost extension (NCE) to run to 30 June 2015. According to the justification in the project extension proposal, this was because: (a) the project had started 10 months later than planned (approved by UNEP in August 2010 but started June 2011); (b) implementation in the pilot countries had been slower than expected; (c) country leadership in Chile changed which caused extra delay; (d) the Vietnamese team needed more time to understand and disseminate the concept of mainstreaming ecosystem services into development planning; and (e) Trinidad and Tobago wanted to realign the project concept with newly available methodologies.

[14] Formerly the project referred to 'South Africa/Lesotho' and many deliverables were listed for both. A specific annex detailing revisions to the transboundary component (Lesotho) of the ProEcoServ project in South Africa was attached to the minutes of the 2nd PSC meeting.

65. A further 6-month NCE extension from 30 June to 30 December 2015 was approved to enable the completion of various final technical and financial reports from Chile, South Africa and Trinidad and Tobago (to be delivered by 30 September 2015), complete outreach and results dissemination activities, including hosting a final 2-day project meeting in Nairobi in September 2015, and for the production of a final report and identification of future actions based on key findings (to be delivered by 30 December 2015).

2.7 Reconstructed Theory of Change of the Project

2.7.1 Theory of Change - introduction

66. A good results framework should clearly articulate the logic that underpins the project's strategy and present clear causal relationships between a project's activities, outputs (goods and services delivered by the project) and immediate project outcomes (changes resulting from the use of project outputs by key stakeholders), and longer-term intermediate states and the project's ultimate desired impact (changes in environmental and social benefits). A Theory of Change (ToC) is a diagrammatic representation of such causal relationships derived directly from the project strategy/design documents, and an important element of the evaluation process is the need to reconstruct a Theory of Change (ToC) for the project.

2.7.2 Project rationale and strategy

67. Although the scientific basis of the MA is considered sound (comprehensive, state of the art) the interface with policy has been weak and uptake of the science poor. The rationale for the project's intervention was that a lack of critical information, decision-support tools, lessons learned and 'best practice' on ecosystem services (ES) assessment and valuation, and clear examples demonstrating how they can be used in practice, combined with a lack of awareness and knowledge of these among decision-makers in the four countries, act as barriers preventing the integration of science (and the economics) of ES into policy formulation and improved and more sustainable management of the environment.

68. The project argues that demonstrating the value of ES and making information and tools available in a tailored 'user-friendly' form to decision-makers and 'institutionalising' the use of these tools and information (Decision Support Systems, or DSS[15]) will lead to wider adoption of ES approaches and ecosystem management by policy-makers and managers, hopefully contributing to a paradigm shift towards the wide integration of ecosystem services thinking into development policy and planning, which would ultimately lead to tangible global environmental and human welfare benefits.

69. While positive impacts on ecosystem services and human wellbeing are usually difficult to achieve within the typical 4-year time frame of a GEF-funded project such as ProEcoServ, earlier (precursor) stages along the causal chain, which include new knowledge or tools produced and disseminated, or changes in awareness and understanding, as well as changes in policies, decisions, investments or behaviour shifts, can usually be measured and demonstrated[16]. These stages are important measures of progress in themselves, as they illustrate changes in the way that issues are viewed or explored and can introduce new options for consideration in policy and decision contexts.

70. The overall project strategy was to demonstrate how best to integrate ecosystem service tools into policy and decision-making with the longer term strategic goal to contribute to the mainstreaming of biodiversity conservation and ES approaches into sustainable development planning. The project's strategy

[15] There are various definitions of Decision Support Systems (DSS) – see https://en.wikipedia.org/wiki/Decision_support_system. Often they relate to computerized systems. In the context of the ProEcoServ project they refer to any system that supports and enhances decision-making, usually involving a mixture of information (which can incorporate raw data, documents and personal knowledge), tools and methods.

[16] See - Ruckelshaus, Mary, Emily McKenzie, Heather Tallis, Anne Guerry, Gretchen Daily, Peter Kareiva, Stephen Polasky et al. "Notes from the field: lessons learned from using ecosystem service approaches to inform real-world decisions." *Ecological Economics* (2013). doi:10.1016/j.ecolecon.2013.07.009

is set out in its first three Components[17], comprising a set of activities that would lead to outputs, which, if achieved, would then deliver five 'technical' outcomes[18] (Outcomes 1.1, 1.2, 2.1, 2.2, and 3.1 – see Table 2 above and Annex 5). These would then lead to several intermediate outcomes and states and delivery of the project's aims and eventual impact.

71. These Components have a series of interrelated and interdependent series of activities and outputs (see Figure 4), with, for example, results from project activities under Component 1 (Policy Support Tools) which is focused on delivering ecosystem services assessment information and decision-support tools feeding into Component 2 (Policy environment), and both of these then feeding into Component 3 (Science-policy interface)[19].

72. A review of the outcomes as stated in the project's logframe revealed that the project has more control/ability to deliver some more than others. For instance, for Outcome 1.1 it seems reasonable to expect that the project could deliver improved access to strengthened capacity and technical advisory services to decision-makers in the time frame of the project, and is therefore appropriate at the outcome level, but Outcome 2.2 - Ecosystem services are integrated into socio-economic, legal and policy instruments – is less likely as it relies heavily on non-project stakeholders and opportunities over which the project has no direct control (e.g. timetable for review of national legislation relating to biodiversity or other development planning cycles) and can be considered to be at a higher level in the causal chain (although limited achievement of this outcome by the project is possible). Similarly, the project has less direct control over delivery of project Outcome 3.1 ('Increased policy relevance of ecosystem services sciences' results in international BD and ES-related processes').

73. In addition, although one of the stated aims of the project in the ProDoc is the development of, and access to, innovative biodiversity conservation financing instruments, this has not been a focus for the project (not stressed in project design documents) and is really only partially captured through one specific Output (1.2). Consequently, the original causal logic presented in the ProDoc is confused in places and difficult to follow; the reconstructed Theory of Change (ToC) attempts to untangle this.

2.7.3 Reconstructed ToC

74. A ToC for the ProEcoSev project is presented in Figure 4[20]. It was formulated during the TE's inception period, based on a review of the logic and the various components/elements of the project set out in the ProDoc, with input from project managers, but revised for this final report following feedback from TE interviewees. The colour coding of the arrows in Figure 4 refers to the following: blue arrows indicate the causal progression, with, for instance, outputs (if achieved) leading to outcomes and then later to medium term outcomes, assuming that the drivers (white arrows) and assumptions (red arrows) continue to hold.

75. The project's stated objective – to reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision-making - is a combination of hoped for results at the intermediate state and impact levels (reduced threats to globally important biodiversity and ecosystem services) and outcome level (integration of ecosystem service assessments and tools into decision-making processes). In fact, it is the latter, the delivery of the means to achieve the intermediate state/impact that has been the real focus and objective of the project. The project

[17] Component IV relates to project management and is not relevant here.

[18] The project outcomes and outputs under these components are summarized in the Logical Framework Analysis (Logframe) of the Project Document (Annex 4).

[19] Component 3 is perhaps misnamed as the whole ProEcoServ project is concerned with supporting and improving the 'science-policy interface' for ecosystem services at various levels and Components 1 and 2 can be seen as faces of this at local and national levels.

[20] The project did not prepare a ToC itself (ToCs were not required for GEF project by UNEP during the design period), although a ToC would have been useful in articulating the project's vision and could have guided important choices made during its design and early implementation and particularly help identify intermediate results and longer term impacts (which are poorly described in the ProDoc).

does not directly address the reduction of threats to biodiversity and ecosystem services (or their state), which has not been measured by the project (there is no logframe indicator for GIB or ES health, for instance). However, this was a more realistic objective for the four chosen pilot countries within its four-year timeframe. It should be noted thought that delivery of this within the timeframe depended on the successful development, understanding and acceptance of the decision-support tools and the timing of opportunities to influence policies (entry points) over which the project has had little direct control, which makes most mainstreaming projects higher risk than other types of GEF projects.

76. The project's final desired (long-term) impact, in terms of globally important biodiversity (the GEF Focal Area objective), can be formulated from the project's overall environmental problem analysis set out in the ProDoc as '*improved status and resilience of globally significant biodiversity and habitats and ecosystems, such as such as mangrove wetlands, dry-lands and coastal and marine ecosystems, and the stabilisation, improvement and sustainable provision of ecosystem services for human well-being*'. This is to be reached through an intermediate state where threats to GIB and ES provision are reduced and protection of these is improved.

77. No specific indicators for GIB or ES e.g. area/status of forest or wetlands, or populations of specific threatened species are defined. The key habitat/ecosystem types and associated biodiversity of the selected pilot sites are only generally described (grasslands in South Africa, mangroves in Vietnam, coastal and marine habitats in Trinidad and Tobago, and mountain and desert ecosystems in Chile) in project documents.

78. The project aimed to produce the following initial direct and linking outputs (mostly grouped under Component 1):

- Ecosystem services in pilot areas mapped spatially (Output 1.1.1[21])
- GIS-based valuation of ecosystem services at sub-national levels undertaken (focus on regulating services) (Output 1.1.4)
- Supply response functions estimated for selected bundles of ecosystem services (Output 1.1.2)
- Trade-off matrices produced across ecosystem services and competing natural resource uses and human well-being (Output 1.1.3)
- Demonstration of scenario-planning as a decision-support tool for understanding risk and uncertainty and building resilience (Output 1.1.7)
- Participation of local stakeholders in piloting scenario planning (Output 1.1.9).

79. Together these contribute to activities that lead to further outputs: key information on ecosystem services distribution, value and options collected and available to policy/decision-makers, including from pilot studies (Output 2.2.4) and scenarios produced for bundles of ecosystem services under different plausible futures (Output 1.1.8), which together contribute to a further project output and a project outcome – Decision-support systems (user-friendly tools, relevant data, approaches, etc) developed at various levels of the pilot countries to guide decision-makers and stakeholders on choosing development strategies which ensure sustainable flow of selected bundle of ecosystem services (Output 1.1.5 and Output 1.1.6, Outcome 1.1).

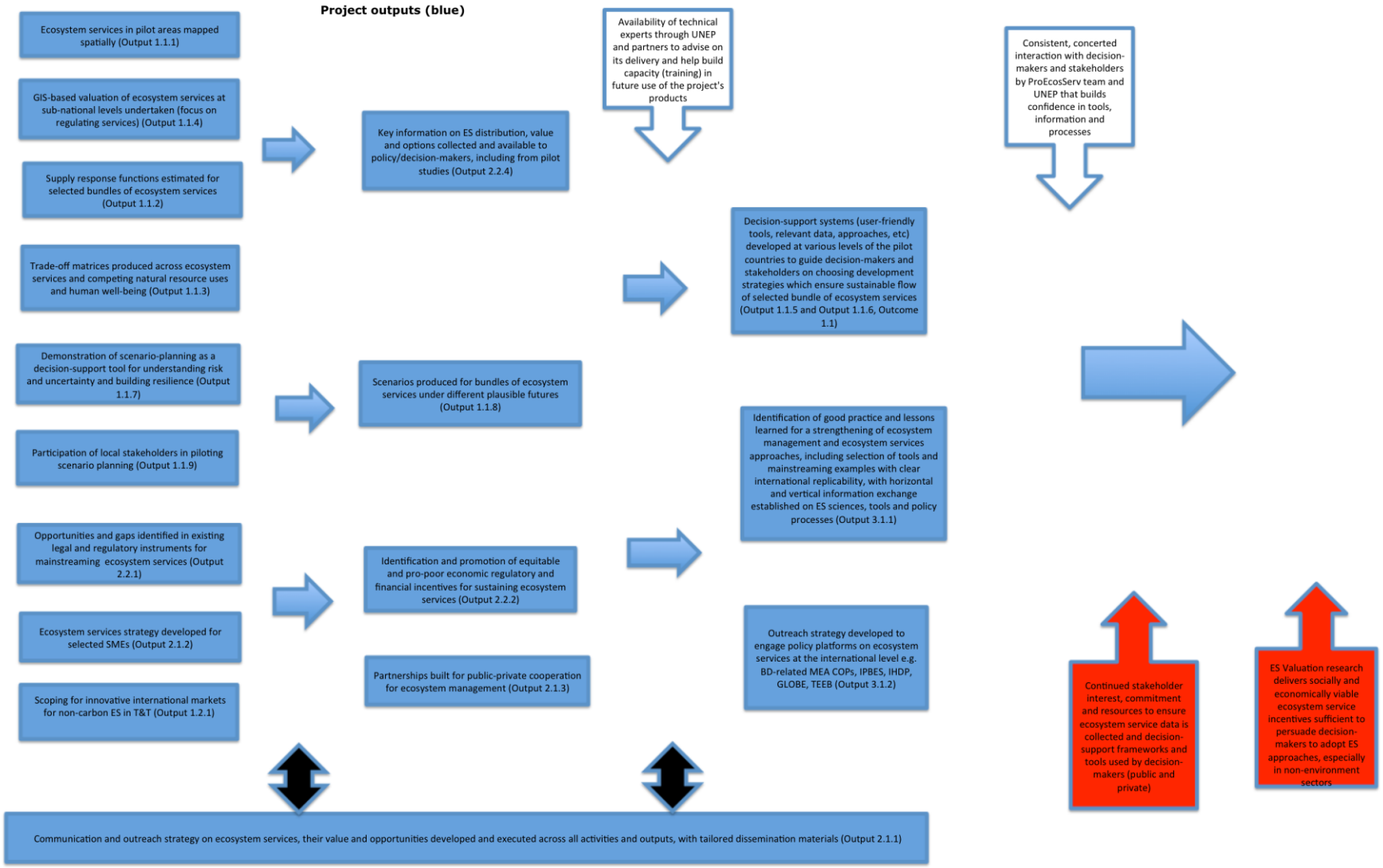
80. A second set of similarly overlapping outputs (mostly under Component 2) dealing with activities to identify opportunities and gaps (entry points) in existing legal and regulatory instruments for mainstreaming ecosystem services and where best to target relevant decision-support tools and information and capacity building (Output 2.2.1), scoping for innovative international markets for non-carbon ES in Trinidad and Tobago (Output 1.2.1), and the development of an ecosystem services strategy

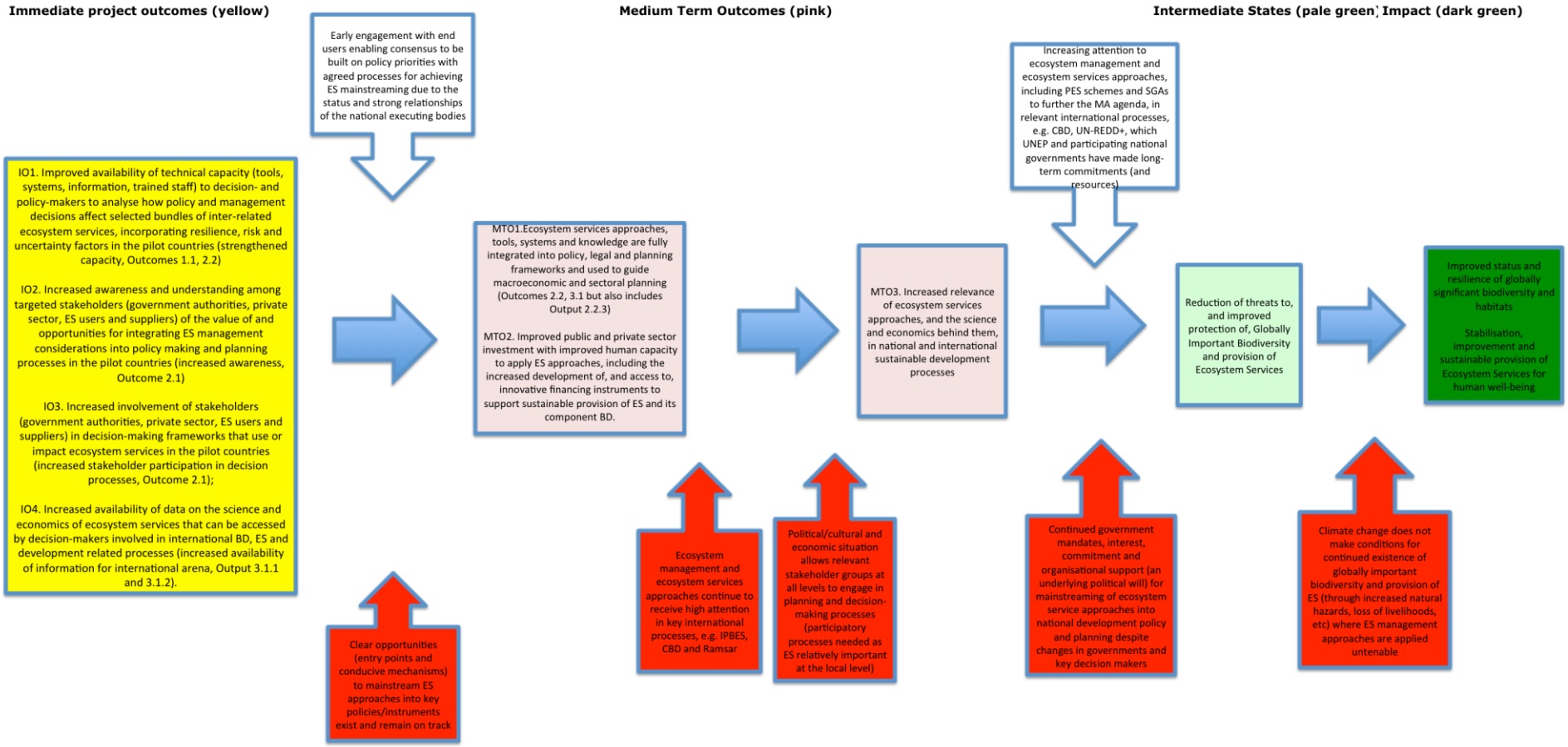
[21] Output and outcome numbers from the ProDoc/logframe have been left at relevant places to help visualize how the different elements of the lower level of the ToC link together, although some have been reworded to make them clearer and a couple were added in that were missing but being undertaken by the project. Many of them map fairly well into parts of the ToC, although not necessarily into the original arrangement/hierarchy.

developed for SMEs (Output 2.1.2), with support to local stakeholders to participate in piloting scenario planning (Output 1.1.9), which then feed into further outputs:

Figure 4: Reconstructed Theory of Change (ToC) for the ProEcoServ Project

(IO = immediate project outcome, MTO = medium term outcome, white box = drivers, red boxes = assumptions)) Note: many of the outputs contributed to several others, but for the sake of clarity connections are simplified and only the general direction of the logical chain is show at the output level




Immediate project outcomes (yellow)
Medium Term Outcomes (pink)
Intermediate States (pale green), Impact (dark green)
Early engagement with end users enabling consensus to be built on policy priorities with agreed processes for achieving ES mainstreaming due to the status and strong relationships of the national executing bodies
Increasing attention to ecosystem management and ecosystem services approaches, including PES schemes and SGAs to further the MA agenda, in relevant international processes, e.g. CBD, UN-REDD+, which UNEP and participating national governments have made long-term commitments (and resources)
IO1. Improved availability of technical capacity (tools, systems, information, trained staff) to decision- and policy-makers to analyse how policy and management decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors in the pilot countries (strengthened capacity, Outcomes 1.1, 2.2)
IO2. Increased awareness and understanding among targeted stakeholders (government authorities, private sector, ES users and suppliers) of the value of and opportunities for integrating ES management considerations into policy making and planning processes in the pilot countries (increased awareness, Outcome 2.1)
IO3. Increased involvement of stakeholders (government authorities, private sector, ES users and suppliers) in decision-making frameworks that use or impact ecosystem services in the pilot countries (increased stakeholder participation in decision processes, Outcome 2.1);
IO4. Increased availability of data on the science and economics of ecosystem services that can be accessed by decision-makers involved in international BD, ES and development related processes (increased availability of information for international arena, Output 3.1.1 and 3.1.2).
MTO1.Ecosystem services approaches, tools, systems and knowledge are fully integrated into policy, legal and planning frameworks and used to guide macroeconomic and sectoral planning (Outcomes 2.2, 3.1 but also includes Output 2.2.3)
MTO2. Improved public and private sector investment with improved human capacity to apply ES approaches, including the increased development of, and access to, innovative financing instruments to support sustainable provision of ES and its component BD.
MTO3. Increased relevance of ecosystem services approaches, and the science and economics behind them, in national and international sustainable development processes
Reduction of threats to, and improved protection of, Globally Important Biodiversity and provision of Ecosystem Services
Improved status and resilience of globally significant biodiversity and habitats
Stabilisation, improvement and sustainable provision of Ecosystem Services for human well-being
Clear opportunities (entry points and conducive mechanisms) to mainstream ES approaches into key policies/instruments exist and remain on track
Ecosystem management and ecosystem services approaches continue to receive high attention in key international processes, e.g. IPBES, CBD and Ramsar
Political/cultural and economic situation allows relevant stakeholder groups at all levels to engage in planning and decision-making processes (participatory processes needed as ES relatively important at the local level)
Continued government mandates, interest, commitment and organisational support (an underlying political will) for mainstreaming of ecosystem service approaches into national development policy and planning despite changes in governments and key decision makers
Climate change does not make conditions for continued existence of globally important biodiversity and provision of ES (through increased natural hazards, loss of livelihoods, etc) where ES management approaches are applied untenable

- Identification and promotion of equitable and pro-poor economic regulatory and financial incentives for sustaining ecosystem services (Output 2.2.2); and
- Partnerships built for public-private cooperation for ecosystem management (Output 2.1.3).

81. A major contribution by the project was seen as the capturing of experience on the development, testing, demonstration and promotion of ES decision-support tools and their mainstreaming into policy and decision-making frameworks (with a different focus on each of these in the four pilot countries). This was to be delivered through a third set of activities mostly related to Component 3 (although some under Component 2 and also being fed results from Component 1). A key output was to be the identification of 'best practice' and lessons learned for strengthening of ecosystem management and ES approaches, including selection of tools and mainstreaming examples with clear international replicability, with 'horizontal and vertical' information exchange established on ES sciences, tools and policy processes (Output 3.1.1). At the same time, the project was to develop an outreach strategy to engage policy platforms on ecosystem services at the international level e.g. BD-related Multilateral Environmental Agreement (MEA) Convention of the Parties, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), GLOBE, and The Economics of Ecosystems and Biodiversity (TEEB) (Output 3.1.2).

82. Although communication and dissemination are identified within various outputs in the project's logframe (Communication and outreach strategy on ecosystem services, their value and opportunities developed and executed across all activities and outputs, with tailored dissemination materials, Output 2.1.1), there are elements of each in most, if not all, project activities. Consequently, communication and dissemination are seen as cross-cutting.

83. Delivery of the above outputs leads to four immediate project outcomes (IOs):

- IO1. Improved availability of technical capacity (tools, systems, information, trained staff) to decision- and policy-makers to analyse how policy and management decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors in the pilot countries (**strengthened capacity**, Outcomes 1.1, 2.2)
- IO2. Increased awareness and understanding among targeted stakeholders (government authorities, private sector, ES users and suppliers) of the value of and opportunities for integrating ES management considerations into policy making and planning processes in the pilot countries (**increased awareness**, Outcome 2.1)
- IO3. Increased involvement of stakeholders (government authorities, private sector, ES users and suppliers) in decision-making frameworks that use or impact ecosystem services in the pilot countries (**increased stakeholder participation in decision processes**, Outcome 2.1);
- IO4. Increased availability of data on the science and economics of ecosystem services that can be accessed by decision-makers involved in international BD, ES and development related processes (**increased availability of information for international arena**, Output 3.1.1 and 3.1.2).

2.7.4 Outcomes to impacts

84. There are a number of intermediate results/stages further along the causal pathway that also need to occur for the realization of the final desired impact. Delivery of the immediate project outcomes would be expected to lead to three medium-term outcomes (MTO). These are:

- MTO1.Ecosystem services approaches, tools, systems and knowledge are fully integrated into policy, legal and planning frameworks and used to guide macroeconomic and sectoral planning (Outcomes 2.2, 3.1 but also includes Output 2.2.3)

- MTO2. Improved public and private sector investment to apply ES approaches, including the increased development of, and access to, innovative financing instruments to support sustainable provision of ES and its component BD (includes Outcome 1.2)
- MTO3. Increased relevance of ecosystem services approaches, and the science and economics behind them, in national and international sustainable development processes, with an increased connectivity and convergence of policy frameworks with ecosystem service approaches, which were among the long-term aims of the Project.

85. If the above medium term outcomes are achieved then (along with other non-GEF project inputs), over the longer term, it would be expected that there would be a reduction of the threats to, and improved protection of Globally Important Biodiversity (GIB) and provision of ES (the intermediate state), which would lead to the project's ultimate desired impact of improved status and resilience of globally significant biodiversity and habitats, and stabilisation, improvement and sustainable provision of ES for human well-being.

86. However, there are a significant number of drivers and assumptions that operate over different scales that may enhance or impede the adoption of project outputs and outcomes and the eventual achievement of the project's desired impact. Analysis and presentation of assumptions and impact drivers is rather weak in project documents (in part because there was no ToC). Assumptions were identified in the logframe, and discussed briefly in the ProDoc[22], but some of these are better viewed as preconditions for the project to take place. For instance, '*key stakeholders are willing to engage with ProEcoServ and interested in learning about new approaches and tools that might influence and change their perceptions of development processes and their link to ecosystems*' was one of the criteria in choosing which countries to involve in the Project. Similarly, impact drivers are not adequately described (only indirectly and not identified as such) in project design documents. For the reconstructed ToC, the key assumptions are that:

- There is continued stakeholder interest, commitment and resources to ensure ecosystem service data is collected and decision-support systems can be used by decision-makers (public and private);
- ES valuation research provides sufficient socially and economically viable ecosystem service incentives to persuade decision-makers to adopt ES approaches, especially in non-environment sectors;
- Clear opportunities (entry points and conducive mechanisms) to mainstream ES approaches into key policies/instruments exist and remain on track;
- The political/cultural and economic situation allows relevant stakeholder groups at all levels to engage in planning and decision-making processes (participatory processes needed as ES relatively important at the local level);
- Continued government mandates, interest, commitment and organisational support (an underlying political will) for mainstreaming of ecosystem service approaches into national development policy and planning despite changes in governments and key decision makers;
- Climate change does not make conditions for the continued existence of GIB and provision of ES where ES management approaches are applied untenable (through increased natural hazards, loss of livelihoods, etc).

87. There are also a number of drivers that the project (or its partners) could influence to promote progress along the causal chain. These include:

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The identification of assumptions in the logframe is cursory and does not fully mirror the list of assumptions presented in project documents or the rather extensive list of 'risks' (most of which can be reformulated as assumptions) given in the main text.

- Availability of technical experts through UNEP and its partners to advise on ES assessment, valuation and mainstreaming and help build capacity (training) to further embed project results;
- Strong relationships between the national executing bodies and end users enabling consensus to be built on policy priorities with agreed processes for achieving ES mainstreaming; and
- Increasing attention to ecosystem management and ecosystem services approaches, including PES schemes and SGAs to further the MA agenda, in relevant international processes, e.g. CBD, UN-REDD+, to which UNEP and participating national governments have made long-term commitments (and resources).

3 EVALUATION FINDINGS

3.1 Strategic Relevance

3.1.1 Alignment with GEF focal areas and strategic priorities

88. The project contributes to the GEF Biodiversity (BD) Focal Area, and some of its sub-components at local level are also relevant and contribute to the Land Degradation (LD) and Climate Change (CC) focal areas e.g. through project activities at Eden in South Africa and at San Pedro de Atacama in Chile. The project supports achievement of the global outcomes of GEF IV Strategic Programs: BD-Strategic Objective 2 – 'to maintain biodiversity in production landscapes/seascapes and sectors', has contributed to the achievement of the SP4 Goal of the Strategic programme for GEF IV (Strengthening the policy and regulatory framework for mainstreaming biodiversity), through aiming at mainstreaming biodiversity in production landscapes/seascapes and sectors. It has also been compliant with the Strategic Priorities 4 and 5 through a multi-pronged approach that supports the strengthening of policy and regulatory frameworks for mainstreaming biodiversity, while removing critical knowledge barriers and (to a lesser extent) fostering markets for biodiversity goods and services.

3.1.2 Relevance to global, regional and national environmental issues and needs

89. At the global level, the project was highly relevant to the previous Millennium Development Goals and their successor, the Sustainable Development Goals (SDGs, notably SDG 6 - Ensure availability and sustainable management of water and sanitation for all; 13 - Take urgent action to combat climate change and its impacts; 15 – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss). The economic perspective on ecosystem management in the context of sustainable development and poverty eradication is also highlighted in the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012 (Rio+20), 'The Future We Want'.

90. The project is also in line with national priorities and plans. For instance, the need to protect and better manage ES is highlighted in various other environmental policy documents in the four countries. For example, water resource management and potential conflict over water resources (especially in light of predicted climate change effects) are seen as national priorities in Chile and South Africa. In Chile, the President launched a national water strategy in 2013, which mentions potential use of water balance models – providing high-level strategic support for the approaches and tools being developed for San Pedro de Atacama, and their subsequent replication, and in South Africa, the protection of strategic water source areas which cover a tiny fraction of the country yet produce most of its water, is considered an urgent national priority in the face of a series of droughts in recent years. Consequently, ProEcoServ-SA's focus on strategic water source areas in the Olifants catchment (see paragraph 137 and subsequent paragraphs) was considered highly relevant by interviewees. Similarly the project's focus at Eden District on learning how to

better manage the landscape to mitigate disasters caused by natural hazards, such as like floods, droughts, wildfire and storm-waves[23], using an ecosystem approach was considered highly relevant. Many other examples are given in national reports confirmed during TE interviews. Indeed, many interviewees stated that the project had remained or become more relevant as it has progressed in all four countries.

3.1.3 Alignment with UNEP's strategy, policies and mandate

91. The Project fits well under UNEP's Medium Term Strategy (MTS) for 2010-2013. It is consistent with UNEP's mandate, and relevant to several UNEP Governing Council decisions, and is particularly relevant to four of the MTS's five 'means of implementation' – 'sound science for decision-makers', 'awareness-raising, outreach and communications', 'sustainable financing for the global environment' and 'capacity-building and technology support (Bali Strategic Plan)'. It contributes indirectly to all three MTS Expected Accomplishments (EA) within the Ecosystem Management sub-programme (EMSP) for 2010-2013[24], and it also complements a number of UNEP projects under its Ecosystem Management and Climate Change sub-programmes, particularly in relation to watershed protection, ecosystem-based adaptation, as well as UNEP's follow-up work on the MA and GLOBE.

92. The project particularly complements other on-going work on ES assessment and valuation and Natural Capital Accounting/Green Accounting being undertaken by the UNEP's ESE Unit[25] and has been integrated into the work being undertaken by the Unit. The project is also one of a number of ES-themed projects being funded by GEF across the world and the ProDoc lists a large number of GEF- and non-GEF funded projects and initiatives that had been identified for potential collaboration with the project.

Alignment with the Bali Strategic Plan (BSP)[26]

93. The project has included specific activities and outputs identified to build capacity to use and promote decision-support tools, including ES valuation, scenario development, trade off analysis, with targeted workshops (under Components 1 and 2) but also a series of awareness-raising initiatives and promotion of project results (which can be seen as helping to build understanding and technical knowledge and thus capacity under Components 2 and 3). Consequently, the project's aims and objectives have been relevant to, and consistent with, the BSP for Technological Support and Capacity Building which aims at more coherent, coordinated and effective delivery of capacity building and technical support at all levels and by all actors, in response to country priorities and needs.

Gender balance

94. The global PMU, based at UNEP HQ in Nairobi, as well as project management teams in each of the four countries made considerable efforts to ensure women were included in project activities, and that there was a high level of women acting in senior positions in each of the four country teams (considered successful for all countries). In addition, there was an adequate gender balance on both the PSC and

[23] Between 2003 and 2008, the Eden District accounted for 70% of the provincial government's direct disaster damage costs – US$ 160 million – excluding indirect damages and damages incurred by the private sector. Natural hazard claims incurred by just one short-term insurer in the Eden District over the last 15 years amounted to some US$ 5.5 million, with more than 78% of these claims made after 2006. Future increases in extreme events are predicted in the Eden District linked to expected climate changes. These impacts occur against a backdrop of large economic and social inequalities leaving vulnerable people and places in this region ill-equipped to prepare for, cope with and adapt to disasters.

[24] Within the EMSP, it is relevant to (EA(a) 'countries and regions increasingly integrate an ecosystem management approach into development and planning processes'; (E(b) 'countries and regions have capacity to utilize ecosystem management tools' and EA(c) 'countries and regions begin to realign their environmental programmes and financing to address degradation of selected priority ecosystem services'). However, it should be pointed out that the project's connection with UNEP EAs and programmatic objectives was not highlighted in the project documents, although the fit with UNEP priorities was not judged so important for GEF funding applications.

[25] See http://www.unep.org/ecosystemmanagement/UNEPsWork/EcosystemServicesandEconomics/tabid/514/Default.aspx

[26] http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf

national-level steering committees, which meant that women's issues were kept at the fore during the design and implementation of the project, and there were no obvious examples of gender discrimination found by, or reported to, the TE.

South-South Cooperation

95. The Project had only limited focus on South-South cooperation – mostly through sharing of results and experiences between the country teams that occurred at annual PSC meetings, although some individual team members did maintain direct communications e.g. between the South Africa and Trinidad and Tobago management teams. More could have been made of this and poor South-South cooperation was perhaps a weakness of the project.

The overall rating for project relevance is Highly Satisfactory.

3.2 Achievement of outputs

96. The degree of delivery of the project's outputs is well detailed in the annual PIRs, each country's final report, the project's overall Synthesis Report (for reporting period June 2010 – October 2015, produced by the PMU) and various other end-of-project publications (see Annex 10). The delivery of key outputs is discussed below.

97. According to the project's final year national progress reports, each country has delivered almost all of its agreed activities (using the revised list of activities following the changes after the MTE). As of 21 June 2016, only a small number of activities remain, largely relating to reporting as final payments to the four executing bodies have been delayed over the last year due to adoption of a new IT-based administration and management system (Umoja) adopted by UNEP.

98. As of 31 December 2015 – the operational closure of the project – all activities had been reported as completed.

99. Table 2 provides an overview of the focus of the work that has been undertaken in the pilot countries.

Table 2. Summary of work in pilot countries

Country	Pilot sites/scale	Key ES	Policy support tools and methods used as part of biophysical and valuation exercises	Mainstreaming targets (policy, plan, process)
Chile	Drylands/Desert San Pedro de Atacama (municipality) Antofagasta region (regional)	Water, tourism	Water Balance Model, and Ecotourism Model, using Tableau as framework	Municipal Land Use Planning Local Plan of development (SPA) (?) Proposed local tourism development strategy and plan Regional Plan of development - Antofagasta (?)
South Africa	National level	Water, drought mitigation, grazing, erosion control	Ecosystem service maps Communications	Water Policy Resource Strategy National Development Plan
	Mixed habitats including agricultural land Eden district (district)	Flood / fire control, storm surge – Disaster management	Decision support system	Disaster Management plan / National Disaster Management Act

	Mostly grasslands Olifants catchment (catchment)	Water (quality / quantity)	Maps of freshwater ecological infrastructure Environmental flow assessment and scenario planning and valuation	Water resource classification
	Grasslands/ agriculture Polihali Dam (transboundary South Africa -Lesotho)	Water (quality/ quantity), erosion control	Maps identifying priority areas for restoration Compiled data for integrated environmental flow assessment	
Trinidad & Tobago	National Level	All	Ecosystem Services introduced in SEA	National Spatial Development Strategy Tobago Comprehensive Economic Development Plan
	National level	Coastal recreation, carbon sequestration,	Meta analytic value transfer methods integrated with GIS tools	National Spatial Development Strategy Tobago Comprehensive Economic Development Plan
	Wetland Nariva swamp - Trinidad (Site specific)	Pollination, Carbon sequestration	Exclusion studies InVest (Pollination Model, Carbon Model) Valuation (market values, proportion attributable to pollination) Fragstat	National Spatial Development Strategy
	Forest Eastern Northern Range, Caura and Maracas Valley and Tucker Valley, Trinidad (Site specific)	Soil retention, Water purification	RUSLE Economic valuation (clear up and replacement costs) InVest (sediment retention model, water purification model, and pollination model to a lesser extent)	National Spatial Development Strategy Hillside Regulation (development) Policy PES Caura Land Use Plan
	Coral reefs, mangroves, seagrasses South West Tobago Buccoo Reef region (Site specific)	Coastal protection	InVest and alternative model Scenario Analysis GIS-based valuation using meta analytical value transfer method MIKE by DHI	National Spatial Development Strategy Marine spatial planning Tobago Comprehensive Economic Development Plan
	Forest Main ridge of Tobago (Site specific)	Water provision	Valuation (replacement cost)	National Spatial Development Strategy National Capital Accounts Tobago Comprehensive Economic Development Plan
Vietnam	Ca Mau province mangroves (Provincial)	Coastal protection Carbon storage	InVest Valuation & Scenario analysis	Land use planning National Green Growth Strategy to 2020 National Strategy for Environmental Protection to 2020 Party Resolution no. 24NQ/TW, on climate change, natural resources management and environmental protection Land use planning for Ca Mau including Ca Mau National Park

Source: Updated from MTE report

100. As can be seen from Table 2 a wide range of ecosystem services have been targeted by ProEcoServ (grass and dryland, forests (terrestrial and mangrove) and marine ecosystems) and at varying scales (site, catchment, provincial, national), across the four countries, which provides a good range of experiences of trying to develop DSS tools and mainstream ES at different scales, for different ES, and in different institutional, social and political contexts.

101. All countries started out using InVEST. InVEST was chosen as a tool specifically because of the tool's ability to model and value the regulating services identified by stakeholders of relevance to restoration efforts and water security, e.g. the role and value of intact native vegetation in securing water quality and quantity for use in directing the prioritisation of public works programmes. However, some countries also used other models of ecosystem services where available, e.g. South Africa which tested other tools in the area of disaster risk and regulating ecosystem services, or abandoned InVest in favour of another model considered more suitable to the local situation e.g. in Chile the CEAZA team adopted *Tableau* as the framework platform for developing their two models (see section 3.2.1).

102. Successes and challenges in the delivery of project outputs are described for each country and for the global component in more detail below, in order to provide context and background for the rest of this report.

3.2.1 Chile

103. In Chile the work has been focused on addressing water provision and tourism services at San Pedro de Atacama (SPA), a fragile (montane) desert ecosystem. SPA is a centre of pre-Inca Atacama culture, and has been home to indigenous communities dating back more than 11,000 years. The area faces pressures from mining (lithium and copper and other metals) but is also the second most visited tourist destination on mainland Chile (after Patagonia). The majority of people in the area depend on tourism for their livelihoods (directly and indirectly) but this activity is largely unregulated and there is no sustainable tourism plan for the area. Water use has been a contentious and critical resource in the area (one of the driest places on Earth) with conflict over its extraction from surface sources for mining operations and tourism but also over concerns for its impacts on natural habitats (including local National Parks supporting flamingos and other important fauna and flora).

104. The main objective of ProEcoServ-CL was to develop innovative computer-based models and tools to guide decision-making on sustainable management of water provision and recreation/ecotourism, in the municipality of SPA, along with compiling information on water provisioning and on tourism flows to feed into the model/tools to support future policy and decision-making regarding these ESs in the municipality. This focus at the municipal level was seen as having a high potential for replication to other municipalities across Chile and elsewhere in the Andes region. The ProEcoServ-CL project focused on modeling water flow and provision (Mass Balance Water model)[27] and ecotourism (Tourism model), and developing two associated decision-support tools (the DSS). These were intended as core tools for use in municipal land use/spatial planning but also (apparently) expected to be mainstreamed into regional BD conservation management.

Development of the models

105. Rough mapping of ecosystem services in the region of SPA (Output 1.1.1) was completed and preliminary water provision and tourism data collected to feed into draft ES management models and tools designed by CEAZA staff (Output 1.1.2), which could, potentially, support decision-making.

106. Preliminary project databases to populate the models and DSSs, with relevant information including water demand, tourism activities, and biodiversity indicators, were established for both water and tourism models through a well-received participatory processes that involved local stakeholder groups identifying, providing and confirming relevant information at project workshops, which also helped to build trust and ownership (see paragraph 249). However, the databases are still lacking sufficient data, namely near-real time data on both tourism activity and water flow across the project area, due to the absence of any established comprehensive, official data collection /monitoring systems for either water or tourism.

[27] This is an internationally established approach covering surface and groundwater supply and use. See http://www.sswm.info/content/water-balance-estimation.

107. The absence of a visitor monitoring system at sites of interest at SPA is largely due to a lack of coordination between relevant local and regional institutions and private sector operators. At present, data are only available for a restricted number of tourist sites around SPA[28], and, with the exception of those from formally protected areas, the data are not efficiently managed or easily accessible in a centralized database. ProEcoServ-CL explored several options to try and collect relevant tourism data. One of the most interesting and innovative approaches was the use of geo-tagged tourist photos uploaded to public photo sharing websites, e.g. Flickr[29] (an example of citizen science), which were incorporated into the database/model/decision support tool. It is unclear however, whether this approach can supply all the data needed and it would require wider promotion among the local tourism industry to be really useful. Also, given it is based on a voluntary system there is a question over whether data would be sufficiently unbiased (younger age groups tend to post much more on than others on social media sites) to enable accurate and efficient management decisions to be made. Another option that has been discussed is fitting GPS devices to tourist vehicles – run by the travel agencies, hotels and car hire companies – or cataloguing their journeys using a smart phone app, that would at least allow monitoring of vehicles and thus an approximation of visitor numbers to the sites. At present, although there is widespread interest in establishing a data-gathering scheme for tourism (including from local tour operators and SERNATUR) there is no agreement or funding to move the process forward (see paragraphs 304 and subsequent paragraphs).

108. The water provisioning model faced a similar challenge in gathering reliable data available for the Salar de Atacama (water exchange and flow patterns in the basin are very poorly know)[30] as there is a lack of hydrological and meteorological monitoring stations generally across the Antofagasta region. A number of partners were identified as potential sources of data for developing the Water Balance Model, notably the Dirección General de Aguas (DGA) which possesses climate, precipitation, temperature and evaporation data and the various mining companies operating in the area (from studies undertaken as part of their Environmental Impact Assessment (EIA) requirements). However, attempts were made to obtain data from the latter through DGA and Ministry of Environment (MoE) were unsuccessful as such data are essentially treated as commercially sensitive. As a result, the CEAZA explored the use of an Earth Observation System, where data from the satellite-based system Gravity Recovery is combined with a Climate Experiment (GRACE)[31] so as to detect changes in groundwater over the Atacama region (something not considered previously).

109. Approximations were made where data were missing based on expert opinion but the extremely limited data set rendered an explicit groundwater model for the region unfeasible. Consequently, a decision was taken to focus on the largest watershed, the Rio San Pedro sub basin which had the best data sets (including data from the DGA website and satellite data) and which, although limited, allowed basic statistical analysis of water resources trends and the development of a simple, direct water balance model that provided at least a conceptual understanding of the storage and fluxes of water and interconnections and the potential for water provisioning in this hydrologically closed basin[32]. This represents the first hydrological balance model for the region, so considered an innovative product of the project. Given the difficulties with obtaining data mentioned above, the development of the model can be seen as a

[28] Available data on tourism was very general, captured by the National Statistics Institute (INE) and CONAF (Forestry Institute). CONAF have data on visitors to national parks, INE on how many people arrive and sleep but this doesn't cover all establishments. Data on the motivation of tourists and their expenditure in San Pedro, and the area's carrying capacity for example, are still not available. Data on sustainable visitor carrying capacities for a number of areas of ecotourism importance around SPA, were available from a pre-existing (EuroChile) study from 2006 but was rather limited.

[29] According to the final report for ProEcoServ-CL, the use of locational information from Flickr photos in this way has been shown to be positively correlated with actual visitation at over 800 tourist sites globally.

[30] Data gaps for the Mass Balance Water Model included chemical analysis, data on snow melt at elevation that is needed to understand recharge, and, flow rates of different rivers and streams. Precipitation and temperature data, needed to estimate evapo-transpiration, was also limited, as the meteorological station data at El Tatio (geysers) only covered the period 1992 -2002 (so not so recent).

[31] See - http://www.csr.utexas.edu/grace/ and https://en.wikipedia.org/wiki/Gravity_Recovery_and_Climate_Experiment

[32] An initial hydrological map setting out the location and limits of the basins, which were previously unclear, was developed by the first consultant hydrologist but his replacement chose to develop a different model.

significant achievement by ProEcoServ-CL and the team deserves credit for this, and the approach could be replicated elsewhere in Chile.

110. The tourism model was the less developed of the two models. The intention was to evaluate and model how tourists value and use ecosystems for recreation, and to understand how tourism activities affect ecosystems, particularly in terms of their provision of recreation benefits. This would establish the basis for the DSS tool for ecotourism. The process of model development was again a stakeholder-driven process that included representatives from local and national level private and public institutions linked to tourism in SPA (including tour operators) and representatives from indigenous communities. Several preliminary ecosystem services maps were generated, and the local office of the National Tourism Service (SERNATUR) office at SPA was pleased with the results, which were viewed as useful in helping to define its work towards developing a proposed tourism development and management (zoning) plan.

111. A user-friendly software package, based on *a Tableau* platform[33] was developed by the CEAZA team in La Serena, for both the water provision and tourism/recreation DSS tools, with 'dashboards' for easy operation by potential partners and to make the data easily available to the community. For the tourism DSS tool, several biophysical InVEST models, including the Aesthetic model, Habitat Quality and Rarity model and Habitat Risk Assessment model, were initially explored for their combined potential to evaluate the links and feedbacks between ecosystems and tourism benefits in the local community *(comuna)*. However, in the end the tourism model also adopted *Tableau* as the basic framework, as InVEST was seen as both too complicated and too limiting. The intention was that the water balance model would link into the tourism modeling and mapping work, although this has not yet happened.

112. Training workshops on the models and resulting tools were offered by the project team (led by the CEAZA hydrologist and biologist who designed the two tools) and a DSS tool tutorial hosted on the ProEcoServ web page was presented at the closure activity (19th March 2015), although this was not available when the website was checked by the TE (only demonstration videos available). However, most of these supporting activities took place at the end of the project and there has been little follow-up (see paragraph 301 and subsequent paragraphs).

Results from the models

113. The results from the water balance and tourism models are covered in detail in the ProEcoServ-CL final report, and are to be published in a number of scientific journals so are not repeated here. However, among the key messages from the water balance model was that stream flow remains fairly consistent across years strongly suggesting that groundwater is a major contributor to stream flow and that ground water levels change by very little. This suggest that water extraction at current levels is not a critical issue and undermines the argument feeding the conflict over water that extraction of water for mining (at current levels) reduces the availability for other users (e.g. for irrigation water for local agriculture). This is an important finding as it illustrates the potential role of scientific evidence on ES in helping to address conflicts over the use of natural resources (which are likely to become more common under climate change scenarios), through providing impartial fact-based information, and interestingly, the argument over water between the miners and others has moved on from one of conflict to how best to manage the resource. The water balance model also showed that December is the month of greatest water scarcity, which coincides with the onset of the peak tourist season and irrigation and is consequently when water management is most needed.

[33] The ProEcoServ-CL team used Tableau 8.2 (see http://www.tableau.com/). This software is a data analysis platform that is easy to learn and use. Users can visualize trends and dynamics associated with modelling work of ESs and can generate and share scenarios using this data.

114. Stakeholders interviewed by the TE were appreciative of the focus on water and tourism (still considered key areas of concern for locals) and its involvement of stakeholders, especially after the change of management at SPA following the MTE (see paragraph 357), and most interviewed felt engaged in the various exercises and meetings. However, TE interviews revealed that there had been high expectations from institutions and stakeholders in relation with ProEcoServ results (which were not well managed by the project), especially over the water balance model, so there was widespread disappointment with the outcomes (no follow-up, mixed ownership, no working DSS at present), that there was no concrete handover of the tools at the end of the project which remain with CEAZA, or formal establishment of monitoring systems to collect the necessary data to use the DSS tools, and their future is uncertain (see paragraph 301).

Valuation studies and data collection

115. In addition to the modeling, various surveys were undertaken to collect socio-economic data on water use and tourism in the region, and some 700 individual stakeholders, including tourism operators, NGOs and SMEs, as well as visitors. For instance, tourists were asked to express their preferences (model used contingent valuation[34] or 'willingness to pay') with respect to a sustainable water management scheme. However, results from these surveys were rather mixed and the general feedback to the TE was that they were incomplete and not terribly useful or informative.

116. An economic valuation of the water provision (Output 1.1.4) was also attempted but availability and the quality of existing data, e.g. from DGA, were insufficient to provide a rigorous analysis (too few transactions were registered in what appears to be an 'opaque' water market)[35]. Interestingly, there was resistance to undertaking the economic valuation of water by some of the local communities, with some puzzlement among TE interviewees over how anyone could put a price on water, given their view that the value of water in a desert was (practically, and culturally) 'infinite' (as one interviewee put it "without water we die!"). Some interviewees had concerns that such 'valuation' might lead to purchase of 'their water' by wealthy outsiders leaving the *comuna* without water (or very expensive water). This attitude may have been influenced by awareness of past experiences in neighbouring Bolivia over the 'privatization' of public water supplies and the resulting social unrest it caused, and suggest that ES valuation studies need to be undertaken sensitively and need to consider issues of inequality and access to resources.

Other expected project outputs

117. Trade-off matrices (Output 1.1.3) were not fully developed for SPA, although there were discussions with stakeholders. However, scenario development and planning (Outputs 1.1.7 and 1.1.8)[36] was addressed at an early stage. Local workshops at SPA identified future scenarios for 10, 30, 50 and 100 years and the capacity of the local population to respond to these conditions was synthesized in two main possible scenarios. The first ('positive') scenario was based upon a "*social management of water resources*", which imagined adverse conditions arising from increasing tourism that would be mitigated through 'more technological solutions and innovation' (in other words, use of the DDS tools and other sustainable resource management tools/approaches) that would support better use and planning of ecosystem services, new policies and opening of new markets. The second ('negative') scenario was based on "*water resources and social mistrust*" where water scarcity was predicted to lead to a major crisis involving biodiversity loss, human migration and diseases that would generate conflicts of interests, and increasing the social mistrust in the region. Feedback from some TE interviewees suggested that the

[34] https://en.wikipedia.org/wiki/Contingent_valuation

[35] See - Servicio Ecosistémico de Provisión de Agua. Gestión y Evaluación Económica en la comuna de San Pedro de Atacama, Chile. October 2014. Cristian Geldes. ProEcoServ Project, CEAZA, La Serena, Chile, avalable at http://proecoserv.ceaza.cl/

[36] See - Elementos claves de la discusión sobre Escenarios con miembros del Comité Directivo y otros actores interesados. March 2015. Sonia Salas & Andrés Bodini. ProEcoServ Project, CEAZA, La Serena, Chile, avalable at http://proecoserv.ceaza.cl/

scenario exercise was too esoteric or not realistic, too limited (just two scenarios) and the second scenario was rather extreme. The scenario results have not been updated since the MTE and, judging from TE interviews, have been largely forgotten about by local stakeholders, and do not appear to have been incorporated into the modeling work or other activities at SPA post-MTE.

118. Although the project's PIRs report that activities under Output 2.2.4 (Pilot studies conducted on investment in ecological infrastructure to ensure an accepted minimum and sustainable flow of selected ecosystem services) had been delivered, this appears to refer to just the identification of ecosystem infrastructure needs and the general conservation and restoration measures required to achieve/maintain such infrastructure, rather than any specific on-the-ground pilot studies.

Communications strategy

119. A project communications and dissemination programme was developed (Output 2.1.1), focused on stakeholder groups at SPA including seven different Atacameño indigenous communities (Solor, Rio Grande, Yaye, Socaire, Talabre, Toconao and Sequitor), but also targeted at the regional authorities in Antofagasta (with policy briefs).

120. Communication and outreach activities, particularly those delivered by the new CEAZA team installed after the MTE were considered very effective and praised by TE interviewees. The project team ran a particularly highly regarded local educational programme at schools in San Pedro and Talabre named *"Los caminos de la Patta Hoiri*", which raised awareness among primary and secondary students about the region's nature and ecosystems around SPA, particularly in relation to indigenous culture. Feedback from the schools was that the programme had a high impact with the children, many of whom became 'leaders' (or champions) for the project's ideas and results in their communities.

121. The impact of the programme could be deepened and made more sustainable with some additional (low cost) resources aimed at helping to set up a 'nature club' (e.g. photographic/digital cameras, binoculars, guides), as unfortunately, there was no follow up and the schools have very limited resources. Interestingly, given the focus on involving the parents of their children school activities (for instance, in one scheme children have to read homework with their fathers in the evening, and in another look after a plant for a week at home before returning it to school for someone else to take for a week), the small investment to establish a nature club would probably buy a lot of additional good will among the Atacameno adults who appreciate efforts to engage their children, and help further promote ProEcoServ results in the *comuna*.

122. The project team have produced many very useful and good quality reports and guideline documents to support capacity development at SPA, supplement the models, data collection and workshops, which have been presented to stakeholders at SPA and the national and regional authorities, e.g. user-friendly guide to scenario planning, and many are available through the ProEcoServ-Chile website[37]. There was also a final workshop was also held in March 2015 to present the final project results (Output 1.1.6), which included distribution of a book titled '*Memoria de gestión ProEcoServ 2011-2015*' which summarizes the major work products of ProEcoServ-CL project and provides links for online training materials. Information on all the key deliverables, training material and databases is available on the project's website (http://proecoserv.ceaza.cl/).

Legal and capacity issues

123. A review of the existing legal and regulatory instruments was undertaken early in project implementation including an analysis of the opportunities and gaps through which ES instruments could be integrated into decision-making processes (Output 2.2.1). However, to date, there has been little uptake of products and information from the project into socio-economic, legal or policy instruments at the local

[37] http://proecoserv.ceaza.cl/

(SPA), regional (Antofagasta) or national level, and there has been little promotion of incentives for sustaining ES (Output 2.2.2), except at SPA.

124. Consequently, as it stands at the TE, the two DSSs to guide decision makers on choosing development strategies to ensure a more sustainable flow of selected ecosystem services (Output 1.1.5)[38] have only been partially successful as they lack sufficient data for their effective use and no local group at SPA – neither the municipal authorities nor the local indigenous community council – nor regional government agency (DGA or Ministerio del Medio Ambiente (MMA) in Antofagasta) have adopted the DSS tools, so there is an important question over the sustainability of the project's results and future impact (see paragraph 301). Consequently, although delivery of the outputs from Chile is rated as **Satisfactory,** delivery is considered partially achieved there are issues related to sustainability and ownership.

3.2.2 South Africa

125. South Africa was not visited as part of MTE due to a limited budget. Consequently, the information for South Africa is based on Skype and telephone interviews, document reviews, and a face-to-face interview with the National Project Coordinator for South Africa when she visited London to attend a conference in November 2015, before the TE officially started.

126. South Africa has a long history of work on ES and good quality models and data to build on, with both CSIR and partner SANBI considered among the leading national expert institutions in the area of biodiversity and ES research and policy (respectively). Consequently, ProEcoServ-SA's focus was to lead on mainstreaming and testing various mainstreaming tools and approaches, and building on existing projects and data[39] to achieve its mainstreaming objectives (rather than providing new data, in contrast to other countries notably Trinidad and Tobago).

127. The other major difference between ProEcoServ-SA and the other countries, and interesting and important contrast with, was the team's use of the idea of 'ecological infrastructure'[40] to position ES concepts within the infrastructure focus of national development priorities (so much less emphasis on straightforward economic valuation activities which was more of a focus for other countries). ProEcoServ-SA also had more elements to it than the other target countries, although Trinidad and Tobago also had a large work programme (relative to size of the country project team).

128. The ProEcoServ-SA project operated at 3 levels - district municipalities, the catchment level and the national policy and planning level, and focused on the following areas: biodiversity, water resources, public-works employment programs, disaster management, and private-sector interest in ES, although integrating ES into water resource planning and decision-making to promote the sustainable use/management of water resources was a strong thread running through all of ProEcoServ-SA's work. This multi-scale and multi-focal area approach included three pilot projects, termed 'Use Cases'[41] in South Africa, one at district

[38] For tourism - Sistema de Apoyo a la Toma de Decisiones (DSS) para el Manejo Sustentable del Servicio Ecosistemico/Ecoturismo/Recreacion en la comuna de San Pedro de Atacama March 2015. Craig Weideman. ProEcoServ Project, CEAZA, La Serena, Chile, see http://proecoserv.ceaza.cl/herramientas/modelo-ecoturismo/. For water - Modelacion de agua de la subcuenca del rio San Pedro en la comuna de San Pedro de Atacama. March 2015. Eric Sproles, ProEcoServ Project, CEAZA, La Serena, Chile, see http://proecoserv.ceaza.cl/herramientas/tableau/.

[39] In South Africa particularly, the ProEcoServ project can be best viewed as part of a long-term process to effect change in attitudes, behaviours and practices towards the environment and sustainable development in South Africa.

[40] Ecological infrastructure refers to functioning ecosystems, such as wetland, mangroves and estuaries, that deliver valuable services to people, such as clean water, climate regulation, soil formation and disaster risk reduction, and can be seen as the nature-based equivalent of built infrastructure important for providing services and underpinning social and economic development.

[41] As defined by ProEcoServ-SA, a 'use case' is a form of demonstration project where the intent is to incorporate ecosystem-service information and data into a specific decision context through a process of joint-knowledge production involving scientists, local experts, stakeholders and decision makers. The use cases importantly serve as learning sites for the analysis of impact and pathways to impact thus distilling lessons for broader application.

municipal level (Eden District in south-west South Africa), another at catchment level (Olifants Catchment in the north-eastern part of the country), and a third focused on an important transboundary strategic water source area which straddles South Africa and Lesotho.

129. ProEcoServ-SA used InVEST tools for modeling ecosystem services, and to build a variety of spatial data layers at the national level. Training, targeted at potential users, was provided on the spatial data layers and their use in future planning and prioritisation exercises.

130. ProEcoServ-SA has been the most successful of the four countries in terms of outputs, deliverables, and impact, with some very high quality products, which is partly a reflection of the experience and capacity of the lead agency CSIR and its partners SANBI.

131. Spatial mapping of ecosystem services (Output 1.1.1) was carried out at the three Use Case sites and policy relevant benefits and resource management recommendations (Output 1.1.3) along with decision-support tools (Output 1.1.5) to sustain ecosystem service provision were identified in each case with a focus on the role of ecosystem infrastructure for reducing disaster and risk reduction at Eden (Outputs 1.1.7 and 1.1.8), sustainable provision of freshwater supplies (quality and quantity) at Olifants (Outputs 1.1.5) and reducing soil erosion (Outputs 1.1.7 and 1.1.8) for the transboundary system examined between Lesotho and South Africa where clear benefits of restoring ecological infrastructure in the catchments of Lesotho (Outputs 1.1.10) were identified. More details of the Use Cases are given below.

132. At the national scale, ProEcoServ-SA developed six different mainstreaming strategies for integrating ES into national policy, planning and dialogue. These were: (1) Communication tools for ecosystem services; (2) Knowledge co-production for water security; (3) Co-development of national policy instruments; (4) Ecosystem-service models to inform investments; (5) Guiding investments in ecosystem services; and (6) Public-private cooperation for ecosystem management. Most of the project's activities in South Africa were designed to link with each other and ProEcoServ-SA had perhaps the most coherent and integrated design and execution of the four countries. For instance, the national maps of strategic water source areas[42] (produced under mainstreaming Strategy 2), lessons and guidelines developed at a local scale for disaster resilience at Eden District (Use Case 1) and integrated water resource planning in the Olifants Catchment (Use Case 2) all fed into the co-development of the policy instruments (mainstreaming strategy 3) and informed the communications and outreach work (mainstream strategy 1).

Use case 1 - Eden

133. The Eden Use Case aimed to understand the causes of local disasters, e.g. flood, drought, wildfire and storm-waves[43], and explore new ways of building resilience to them using an ecosystem-service based approach, including identifying information, actions and tools to address them as well as agencies able to champion their implementation, and to integrate ecosystem-based approaches into land-use planning and disaster risk management[44] particularly with local and municipal authorities. In this it was very successful.

134. The project examined land management practices in the Eden District and their relationship to environmental (and to some extent social) risk, and developed risk hotspots maps (Output 1.1.1), working in partnership with the municipal authorities and private insurance industry to co-produce and disseminate results and ensure uptake. In addition, the maps were used in a discussion document on risk with the

42 Strategic water source areas are those areas that supply a disproportionately high amount of a region's water in relation to their surface area. These areas are important because they have the potential to contribute significantly to overall water security, supporting growth and development needs that are often a considerable distance away.

43 The Risk and Development Annual Review for the Western Cape, published by the University of Cape Town, highlights that between 2003 and 2008, the Western Cape government departments and parastatals incurred direct damage costs exceeding R2.5 billion in eight severe weather events associated with cut-off lows.

44 In general in South Africa, the focus has been on disaster response/relief rather than mitigation and disaster preparedness and ProEcoServ-SA sought to illuminate the potential role that ES can play in mitigation.

Natural Disaster Management Institute. Project activities included the development of the DSS, communication materials for local planning, and practical clearing and restoration of areas invaded by non-native trees[45] or degraded by land-use practices, in partnership with the private sector and government conservation agencies.

135. Among the numerous important results from the ProEcoServ-SA work at Eden (detailed in the final national report for South Africa), was an innovative systemic risk management strategy for the District which linked each natural hazard to the land-cover change drivers that disrupt the regulation of that hazard and then identified interventions, actions and responsible stakeholders to manage drivers of risk in the landscape. Other products include disaster support tools developed from the work at Eden includes a useful pocket guide ('Let's Respond to Climate Change') that synthesizes and distills the information on disaster risk.

136. This model and particularly how it was co-developed with stakeholders, is likely to be of value and interest to the UNEP Disasters and Conflicts and Climate Change Subprogrammes[46] (potential for replication) which lead on Disaster Risk reduction (DRR) and Ecosystem-based Adaptation in UNEP, and would be worth promoting more widely by UNEP, and to other donor agencies with DRR remits (this does not appear to have been done yet by the ESE Unit in Nairobi).

Lesson 1. The use of the concept of 'risk' can be very effective in helping to bring together a diverse range of stakeholders who would not normally collaborate, including, for instance, in SA, the insurance industry, government authorities, researchers and those concerned with disaster risk management, to understand the value of incorporating ecosystem based management strategies into decision making, and co-design response strategies to enhance the resilience of ecosystems to natural hazards.

Use case 2 - Olifants

137. The second Use Case focused on mainstreaming freshwater ecological infrastructure (for both water quality and quantity) into water resource planning and decision-making to promote the sustainable use of water resources in the Olifants catchment[47].

138. The project team co-developed maps of important freshwater ecological infrastructure using existing national Freshwater Ecosystem Priority Areas (FEPA) maps[48], from the Olifants catchment which were then used to integrate ecosystem services into water management decisions. The FEPA maps highlight 49 priority rivers in the Olifants catchment, of which 82% were selected during stakeholder negotiations to be maintained in a natural or near-natural ecological condition. The team then explored ways to include FEPA maps, together with other technical tools such as environmental flow assessment, scenario planning and valuation, into the legislated classification process. A generic framework on how to include FEPAs was developed, based on a legislated 7-step process that guides Water Resource

[45] The spread of non-native invasive trees was identified as a major driver of vulnerability to flood, wildfire and drought risks.

[46] http://www.unep.org/disastersandconflicts/

[47] Demand for water in this region is among the highest in South Africa, with competing demands from coal mining and coal-fired power generation, large irrigation schemes, major urban centres and steel manufacturing industries, dense rural settlements, and subsistence agriculture.

[48] These represent national consensus on the numbers, types and location of rivers, wetlands and estuaries, needed to protect representative diversity and ecological functioning of South Africa's water resources. See http://bgis.sanbi.org/nfepa/NFEPAmap.asp

Classification[49] in South Africa, with modifications to include ES considerations. This was presented for ministerial approval as a generic framework for future freshwater classification processes in other areas of South Africa. According to interviewees, the results and the framework were well received, so has high replication value. Indeed, the work at Olifants was cited by several interviewees as of extremely high importance (relevance) for South Africa which has been facing severe droughts in recent years (which are likely to be more frequent in the future according to climate change predictions).

139. The mapping work developed at the Olifants catchment also contributed to the development of a map of Strategic Water Source Areas (SWSA) of South Africa (see below).

Use case 3 – Lesotho-South Africa transboundary watershed

140. A third Use Case was undertaken in the Polihali River catchment of Lesotho, an important transboundary strategic water source area which straddles South Africa and Lesotho[50]. Its primary aim of this use case was to identify likely sediment sources of the recently authorized Polihali Dam (part of the Lesotho Highlands Water Project) to prioritise protection and restoration efforts, thereby helping to prevent excessive sedimentation of the Polihali Dam while improving the agricultural potential and other ES benefits for local communities that live within the catchment.

141. ProEcoServ-SA developed a framework to identify the potential for sediment to be eroded or lost from a specific area upstream of the Dam, as well as the potential for sediment to be transported or delivered to the Dam (so adding erosion protection ES) which were modeled as two separate data layers. The final maps identified the priority restoration areas that if targeted would achieve both water security for the Polihali Dam and improved community livelihood benefits. Following presentation of the results to government ministers in Lesotho, a wider environmental flow assessment was ordered to be undertaken prior to building of the Polhali Dam to which the ProEcoServ-SA project contributed. This environmental flow assessment is intended to ultimately guide management systems and operational procedures of the Dam.

142. However, there were significant issues in delivering this part of the project largely due to low capacity in Lesotho to undertake the work - there is no university department of ecology and no local consultants with relevant experience, so Lesotho has had very little direct engagement in the project. Following discussions early on in implementation (2011/2012) between the ProEcoServ-SA team and partners in Lesotho it was decided to change to the execution modality (external experts on transboundary issues were employed) and the status of Lesotho in the project was changed following a recommendation of the MTE at the second PSC meeting in Chile in 2013.

National Level activities

143. ProEcoServ-SA conducted a detailed analysis of the policy and institutional environment early on in project implementation to identify priority national policy instruments and their associated institutions that presented the greatest opportunities ('entry points') for mainstreaming ES and the results from the three use cases. As a result, the following processes were targeted: implementation of the National Development Plan; review of the National Water Resources Strategy (NWRS); review of the Water Pricing Strategy; classification of water resources; review of the Disaster Management Act; guidance for the development of bioregional plans; norms and standards for biodiversity management plans for ecosystems; and review of the National Biodiversity Strategy and Action Plan (NBSAP). In order to achieve these the team particularly engaged with the National Planning Commission, the Department of Water Affairs (DWA), conservation authorities including SANParks, and the Department of Environment Affairs (DEA).

[49] This stipulates a desired condition of the water resource and the extent to which it can be utilised (management class), and is a key tool for developing a stakeholder-driven vision for water development futures at a catchment level and thus influencing water allocation.

[50] The Maloti-Drakensberg water Source Area, a 'water tower' that supplies water to the Gauteng Province, the economic hub of the country.

144. Mainstreaming of ES approaches into these policy and planning processes was aided by the development of four national-level bio-physical maps illustrating water, drought, grazing and erosion, which provided the basis for examining supply response functions and trade-offs, but have also served as useful communications and awareness-raising aids. For instance, the water map helped identify strategic water resource areas which supply a disproportionately high amount of a region's water in relation to their surface area[51] and which have fed into the National Water Policy, as well as catalyzing other activities, e.g. WWF campaigns on water use and management and were considered one of the most important products of ProEcoServ-SA by stakeholders. Similarly, the grazing map allows examination of the impacts of invasive plants on grazing capacity and identifies grazing hotspots, and the team were able to link it to the Government poverty alleviation initiative 'Working for Water', which generates jobs through ecosystem management schemes (see paragraph 327).

145. Among the many other notable deliverables by the ProEcoServ-SA team was the co-development of a framework to guide new investments in ecological infrastructure (Output 2.2.2)[52]. The framework provides seven principles to guide investments through project development and implementation, as well as a more comprehensive approach to investing in ecological infrastructure at a programmatic level and includes (among other things) identification of potential sources for financing investment in ecological infrastructure from both the public and the private sector, and materials for use by stakeholders wishing to make a case for investing in ecological infrastructure. The framework, particularly the concept of investing in ecological infrastructure, has been presented at a number of audiences[53] in South Africa, and TE interviewees commented that they found it a useful approach/tool. The description of the process of developing the framework is given in a ProEcoServ-SA report published by SANBI[54], which may be instructive for other countries (of replication value) and the framework should be more widely publicized by UNEP.

Lesson 2. The use of the concept of 'ecological infrastructure' can be very effective in promoting ecosystem service approaches to stakeholders involved in infrastructure and development planning, In South Africa, for instance, they aligned strongly with national development goals, and the emphasis on labour-intensive ecosystem management resonated with national goals of job creation and poverty alleviation. These 'non-financial' values of ecosystem services need to be stressed more by UNEP.

Communications strategy and products

146. The ProEcoServ-SA team produced a communications strategy and toolkit (Output 2.1.1) with key messages and communication tools with which to 'make the case' for biodiversity and ecosystem services with associated training for use by the biodiversity sector and to guide in the communication of scientific research findings and their relevance (how to effectively integrate science results into policy and planning). Specific deliverables included: two national workshops held for conservation practitioners to improve their communication abilities around ES and a national *Ecological Infrastructure Dialogue* held in partnership with the Development Bank of Southern Africa.

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[51] These areas cover 8% of the country, provide 50% of the water, support about half of the national population and contribute to more than 60% to the national economy, however only 16% of their surface area is legally protected. They also represent ecological infrastructure on which a great deal of built infrastructure for water services and water security depends.

[52] The national Biodiversity Planning Forum was used as the key national forum to elicit stakeholder participation within the environmental sector.

[53] The concept of investing in ecological infrastructure has been presented at the Biodiversity Planning Forum (2013, 2014), The Cape Action for People and the Environment Conference (2014); The Investment in Ecological Infrastructure Workshop (2013), National Long Term Adaptation Strategy meetings (2014); National Business and Biodiversity Network meeting (2013, 2014); National Disaster Risk Reduction Think Tank (2014); Symposium of Contemporary Conservation Practice (2013, 2014).

[54] http://www.sanbi.org/sites/default/files/documents/documents/framework-ieimarch2014sanbi.pdf

147. The project produced five excellent case studies and associated infographics covering a range of biodiversity features, ecosystems, ecosystem services, production sectors, combinations of partners (non-profit, private, public), different stages of development and including cooperation in the areas of disaster management, wine farming, forestry sector, water resource management, and wetland offsets, to illustrate successful public-private cooperation on ecosystem management and which illustrate the importance of ecological infrastructure[55]. These were considered useful by government agencies and the insurance sector. Non-project stakeholders interviewed by the TE were generally very complimentary about the project's communications and outreach activities and commented that the quality of the material produced was very high with a high potential for impact.

148. Delivery of the outputs from South Africa is considered fully achieved and rated as **Highly Satisfactory**.

3.2.3 Trinidad and Tobago

149. In Trinidad and Tobago the project carried sets of activities focused on three policy entry points (i) introduction of ES into national spatial planning, specifically to introduce GIS-based ES maps and an associated DSS into spatial development planning in Trinidad and Tobago, focusing on the new National Spatial Development Strategy (NSDS); (ii) development and possible introduction of exploratory ecosystem services accounting into the Trinidad and Tobago's system of National Accounts ('green' national accounts); and (iii) development of a pilot eco-finance scheme, specifically a Payment for Ecosystem Services (PES) scheme (for Trinidad and Tobago only) in collaboration with the Green Fund (Trinidad and Tobago's Environmental Fund) for replication throughout Trinidad and Tobago.

150. Several tools and approaches were explored and/ or used as a part of ProEcoServ. These were biophysical modeling (using a range of methods and approaches); economic valuation; scenario planning; strategic environmental assessments (SEA); financial incentives, specifically a Payment for Ecosystem Services model; and Natural Capital Accounting. The biophysical and economic valuation methods employed were primarily developed to support land use planning.

151. Trinidad and Tobago has struggled a little to complete its outputs and deliver them on time, due to the large number of activities listed (too ambitious), not helped by taking on additional activities e.g. Natural Capital Accounting, a relatively a small management team and reliant on PhD students to deliver some key results (see paragraph 174). However, it should be noted that Trinidad and Tobago has had more of a focus on research/new data collection than the other pilot countries (although Chile also involved new data collection at SPA on tourism and water) which put the delivery of results at higher risk than the other countries, which relied more on existing data sets (in this sense Chile outperformed Trinidad and Tobago since the data, models and scenario building was done from scratch - there was no data at SPA before the ProEcoServ project).

152. Valuable GIS-based spatial maps were produced for a variety of ecosystem services (Output 1.1.1) at three pilot sites – Nariva Swamp (wetland system with a focus on crop pollination, biodiversity ES), Bucco Reef on Tobago (coral reef with focus on coastal erosion and protection ES) and the Maracas and Caura Valleys of the Eastern area of the Northern Range (forest ecosystem providing soil protection, water yield and purification, carbon sequestration ES). Supply response functions were estimated for selected bundles of ES (Output 1.1.2) and used as baseline information for the biophysical modeling exercises at the various pilot sites. The drivers of change of most concern in the pilot sites were well identified (Output 1.1.3), and

[55] The five case studies chosen were: Shared response to shared disaster risk: the Insurance Sector Collaboration Case Study; Shared interests for wine and biodiversity: the WWF-SA Biodiversity and Wine Initiative Case Study; Forestry, fire and biodiversity at Izanqawe: the Izanqawe Case Study; Partnerships for water secure futures through water stewardship: the Water Futures Partnership Case Study; and Shared interest in gaining clarity: the Wetland Offset Guideline Collaboration Case Study. Further information on the case studies can be found at http://biodiversityadvisor.sanbi.org/?attachment_id=3403.

GIS-based economic valuation of some ES (Output 1.1.4) was undertaken in the Northern Range and Nariva Swamp pilot sites. These are the first maps of ES value distribution in Trinidad and Tobago and both the project team (and the global team who facilitated the connection with the international consultant) should be congratulated on this first. Some additional (but more limited) pollination studies were also carried out in parts of the Northern Range on Trinidad, and initial studies investigating water purification and provision, and carbon sequestration on the main ridge of Tobago and coastal recreation covering all of Trinidad and Tobago also undertaken. Overall, the ProEcoServ-TT team has produced much useful and new information which is likely to be important baseline for some areas for the foreseeable future.

153. Specific training (2-day workshop) on economic valuation of ES aimed at building some independent capacity, facilitated by a group of external experts, and was attended by 80 participants, including government staff from the Ministry of Water & Environment, Ministry of Land and Marine Affairs, Ministry of Planning & Sustainable Development (MPSD), and Central Statistics Office (CSO). The decision support tools, e.g. maps, models and valuation results were also offered to the Tobago House of Assembly (Output 1.1.5). Other capacity building workshops were organised by the project, including training on scenarios with various stakeholder groups (Outputs 1.1.8, 1.1.9), and training materials made available to stakeholders. One national scenarios exercise revolved around the pollination research being undertaken at the Nariva Swamp, and involved farmers and other key stakeholders. Another local planning exercise was held in the Caura Valley, the results from which fed into the development of a Strategic Plan (2015 – 2020) for the Caura Valley Village Council.

Eco-finance schemes (PES)

154. Trinidad and Tobago was the only ProEcoServ country explicitly exploring a PES mechanism. The initial idea under Output 2.2.2 was to test a replicable model for a sustainable eco-finance scheme at a pilot site funded through the Green Fund[56] that would demonstrate equitable and pro-poor economic and financial incentives for sustaining ES. It was envisaged that, if successful, this would help secure a sustainable source of financing for PES schemes in Trinidad and Tobago with the Government as the initial 'buyer' of the ES, and that this could be replicated at many other sites in Trinidad and Tobago greatly boosting possibilities for improving management of the environment and investment for BD and ES.

155. Originally, the ProEcoServ-TT intended to develop a PES scheme related to the project's pollination work in Nariva Swamp but the project switched location to the Caura Valley as this was seen as having potentially greater social/community benefits, and, at the time, it was expected there would be substantial baseline data from the Northern Range valuation work (see below) with which to construct the proposal. Two consultants from Costa Rica were contracted to support the development of a proposal for a PES project, and the project was to be built on a previous UNDP-GEF Small Grants Programme-funded 'Fire Guardianship Project' pilot scheme (providing baseline) that offered compensation to the Caura Valley community for cutting and maintaining fire trails in their local 'eco-park'.

156. Although an initial scoping exercise was completed, delivery was hampered by legal obstacles, issues over the governance arrangements of the proposed project, questions about the capacity of the local group to carry out the project (Caura Valley Village Council), and delays in the delivery of (socio-economic) data needed to craft the proposal. More importantly, the Green Fund has been able to approve only a handful of applications (direct approval of the Minister was needed) during the project's implementation period[57], despite being capitalised with many hundreds of millions of US Dollars, so the Fund would no have

[56] The Green Fund, managed by the Ministry of Environment, was operationalized in 2008, and is capitalized by tax on corporate activity, namely 0.1% (increased to 0.3% in January 2016) on gross sales or receipts of companies carrying out business in Trinidad and Tobago. The purpose of the Fund is to financially assist primarily non-profit organizations that are engaged in activities related to the remediation, reforestation and conservation of the environment, but very few proposals were funded over the period 2010-2015.

[57] According to interviewees in Trinidad and Tobago, this has been due to 'political interference' and use of the funds for other than their intended purpose by the previous Government, which has only recently (post ProEcoServ project) come to light. This alleged 'misuse' was to be challenged by the new Government so there is a possibility that the frozen funds will be available in addition to new revenue that has been flowing into the Fund since 1 January 2016.

been able to provide funding for a PES project even if a proposal had been ready in time[58]. Due to these challenges this element of the project has remained undelivered, and up to the TE the proposal had still not been developed sufficiently to be able to be submitted to the Green Fund.

157. Despite the delays in proposal development, ProEcoServ-TT hosted meetings and a series of workshops in April-May 2013 to build capacity of relevant national and local stakeholders to develop a PES project. These were well attended and included representatives from (among others): the Green Fund Secretariat; The Tobago House of Assembly; The Caura Valley Village Council; Town and Country Planning Division (TCPD); and various NGOs throughout Trinidad and Tobago. Judging from interviews there was considerable interest among stakeholders in PES models for Trinidad and Tobago, and the ProEcoServ-TT has certainly helped generate greater interest in the potential opportunities offered by PES schemes (and some awareness of the difficulties of establishing them). The workshops certainly helped to promote the concept of PES and there remains great interest in this approach on the islands. Indeed, judging from interviews, the Green Fund is still very enthusiastic to explore the potential of PES to meet its aims and is still hoping for a concrete application from the ProEcoServ-TT team. Consequently, the TE feels that this element could still be (re)activated with relatively little effort and should at least taken to the stage of submission of a workable proposal to the Green Fund Secretariat.

Recommendation 1. *It is recommended that the ProEcoServ-TT fully develop a project proposal to be submitted to the Green Fund for consideration for funding for a PES scheme in the Caura Valley. This will need additional support to collect the necessary socio-economic data to complete the application. There are likely to be costs associated with this, principally the hiring of a consultant to pull together the proposal, which should be met from the remaining GEF funds held by UNEP Nairobi.* ***Responsibility****: Caura Valley Village Council, ProEcoServ-TT team/UWI, in collaboration with Trinidad and Tobago's Green Fund and the UNEP ESE Unit in Nairobi.* ***Timeframe****: Before end of March 2017.*

158. It should be mentioned that the consultant hired by the project (from Costa Rica with extensive experience of Costa Rica PES schemes, and recommended by UNEP-DEPI), assisted the Green Fund to develop an implementation strategy to devote some percentage of its financial portfolio to a PES-type ecofinance scheme. The aim was to pilot test this new approach through a small project from the Caura Valley community. The Trinidad project team realized that implementation of a PES scheme was unlikely to occur during the timeframe of the project and the mid-term evaluator also identify this as a risk but the team felt that the target was sufficiently attractive that it was worth the risk and none of the other ProEcoServ partners had a PES component. Essentially, the Green Fund was part of the Ministry of Environment and Water Resources whose Permanent Secretary and therefore Head of the Ministry was the Chairman of the National Steering Committee of ProEcoServ TT, and given this connection the project team felt they had a chance to make it happen. The Green Fund at that time had about US$ 100 million with only a tiny amount (about US$ 2 million per year) committed to funding projects. The project team sought to develop a unique sustainable PES scheme in which it was proposed that the Government of Trinidad and Tobago used the Green Fund to become the purchaser of ecosystem services on behalf of the population who they had taxed at 0.1% per dollar. The consultant worked out some implementation details in consultation with the Ministry, and the Caura Valley community was supposed to make a pilot application but this never happened. However, the new government of September 2015 announced that the outgoing government was guilty of an act of deception as the money from the Green Fund was not available for any PES scheme because they had used the Green Fund money collected as tax to secure a bank overdraft. The first annual budget of the new government was due to be unveiled in Trinidad and Tobago and there was

[58] At one point, the Green Fund advised the team to develop a proposal for a shorter one-year project to determine what types of PES would be most appropriate but the project team decided this was too short-term (needed a much better developed project with 4 years of funding, with which the TE agrees).

an expectation (hope) that the Green Fund was to be unfrozen and that the money has could be released and open to applications such as the proposed one from the Caura Valley community.

National level activities

159. At the national level, the team undertook a review of opportunities and gaps in existing legal and regulatory instruments (Output 2.2.1) for mainstreaming of BD and the ES approach early in implementation. This identified the best opportunities for engaging with instruments in Trinidad and Tobago as: the NSDS; the National Hillside Development Policy; the Caura Land Use Plan; and Tobago's Comprehensive Economic Development Plan. Entry points and challenges to engaging with these instruments were identified.

160. Meetings were held with stakeholders and decision makers to identify champions and processes to support development and use of the DSS for ES being promoted by ProEcoServ-TT. The project was particularly successful in this as the National Project Coordinator had a very wide and deep network with long-established connections with senior figures in government, including some he had taught when they were students at UWI.

National Spatial Development Strategy (NSDS)

161. The NSDS is a key planning tool that focuses on regional planning processes across Trinidad and Tobago, and its development coincided with the ProEcoServ-TT timeframe, providing a major opportunity for mainstreaming the project's ES models and decision-support tools.

162. The former Minister in the MPSD formally asked for ProEcoServ-TT support in the development of the NSDS, and the team worked closely with the Ministry to achieve this. Consequently, ProEcoServ-TT had significant influence on the direction and content of the NSDS in relation to ES. For instance, ES maps (from Output 1.1.1) and valuation findings (Output 2.2.3) were made available to the MPSD's Town and Country Planning Division (TCPD) for inclusion in relevant components of the NSDS, where they have been integrated into the policy and planning processes (see paragraph 262). Indeed to some extent ProEcoServ-TT has been seen as an 'extension of the Ministry' able to offer 'technical capacity and support'.

Other national level activities

163. The Government of Trinidad and Tobago was also interested in including Strategic Environmental Assessment (SEA) in the planning process and again requested the ProEcoServ-TT team for support, in this case to fund an international SEA expert to advise on SEA and ES.

164. Several workshops on SEA helped to increase awareness of opportunities and the project produced a useful set of guidelines[59] that have been distributed to various agencies, including TCPD, although it is not clear to extent they have been adopted and are being used as part of normal practice. They are mainly aimed at government level and practitioners and are structured according to key stages with each stage divided into principal tasks (a practical manual). The guidelines are available from the ProEcoServ website (although this was not working during most of the TE) and there has been some international interest, such as from the International Association for Impact Association. However, they have perhaps not had the degree of international exposure that was hoped for and they still need to be piloted.

165. Piloting of the SEA guidelines should be considered as a follow-up to ProEcoServ (full proposal needed), with a case study in one country to field test the manual and focusing on the first steps of the process. Of the four countries, Vietnam (which is already employing SEA), or possibly Trinidad and Tobago, would probably be the most appropriate if relevant data sets are available, although examining how the

[59] UNEP (2014). Integrating Ecosystem Services in Strategic Environmental Assessment: A guide for practitioners. A report of ProEcoServ. Geneletti, D.

guidelines could be applied at the municipal level (for instance in Chile, which would have lots of potential for replication and has been employing SEA since 2010) would also be worthwhile and may be a more manageable option.

166. A review of opportunities for the development of new financial mechanisms for 'non-carbon' ES (Output 1.2.1) was undertaken by ProEcoServ-TT (not carried out by other countries), and a report produced, although this activity was rather an 'outlier' for the project and was not well integrated into other activities on Trinidad and Tobago or the overall ProEcoServ project.

167. Project activities in relation to 'pilot studies on investment in ecological infrastructure' (Output 2.2.4) were reduced, with the main activity limited to a review of the current implementation of the Environmentally Sensitive Areas Rules and other Protected Areas legislation to determine a baseline, but the results of this did not feed directly into any other ProEcoServ project activities, and the concept of ecological infrastructure was not heavily promoted in Trinidad and Tobago (unlike in South Africa). Indeed this was an element that should not have been included in the design of the project for Trinidad and Tobago and illustrates the project's overambition.

168. Although the project has produced some interesting and highly relevant results from the pollination studies relevant to agricultural production (largely from the Nariva Swamp), the Ministry of Agriculture showed little interest in the project or the concept of ES despite attempts to involve them (and keep them informed) over the lifetime of the project – for instance, only two people came to ProEcoServ meetings and then did not engage. This is particularly disappointing given that pollination is vital for agricultural production[60], and there are clear policy implications from the project's pollination work. For instance, assessments of the potential economic losses from pesticide restriction or bans can now be compared with the potential economic benefits of enhancing delivery of pollination services through management advice.

'Green Accounts' and Natural Capital Accounting

169. The Government of Trinidad and Tobago has apparently been interested in 'Green accounting' or Green GDP[61] for some time partly because it could provide a means to show that the country, as the second highest per capita carbon emitter in the world, is addressing the issue through better environmental management.

170. An initial scoping study was undertaken during the first year of the project (Girvan & Teeluckisngh, 2012), which presented a conceptual background and initial high-level estimates to illustrate what is lost if the Government does not consider the value of its ecosystem services. The project also reviewed and developed appropriate methodologies for incorporating ES into national accounts (Natural Capital Accounting - NCA) in Trinidad and Tobago and undertook some limited pilot testing using existing data and valuation studies from the Northern Range of Trinidad[62]. Several meetings and a workshop were held (June 2014) with government officials and other key stakeholders to raise awareness about the issue, and build

[60] However, despite their globally recognized importance, pollination services have not been included in any policy in Trinidad and Tobago, nor are pollination services considered in GDP calculations or in land use planning, and awareness of the importance of pollinators in Trinidad and Tobago is very limited.

[61] 'Green accounting' (or environmentally adjusted national accounts) is a type of accounting that attempts to factor environmental costs into the financial results of operations – see https://en.wikipedia.org/wiki/Green_accounting. Its origins lie in the recognition that the accepted and applied approaches to the measurement of the economy – the national accounts – do not integrate to any significant extent environmental information and hence the understanding of the relationship between the economy and the environment is poorly reflected in the common metrics used for the assessment of economic and national progress (most commonly Gross Domestic Product, GDP). It is synonymous with Natural Capital Accounting, which is defined as the process of calculating the total stocks and flows of natural resources and services in a given ecosystem or region - see https://en.wikipedia.org/wiki/Natural_capital_accounting.

[62] The ProEcoServ-TT work in this area was based on the System of Economic and Environmental Accounts (SEEA), developed by the United Nations Statistic Division (UNSD) which is used as the primary guidance framework for the development of Environmentally Adjusted National Accounts (EANA) or 'green accounts'. see http://unstats.un.org/unsd/envaccounting/seea.asp

capacity locally on experimental ecosystem accounts, with technical support provided by an Australia-based consultant whose input was widely appreciated among technical interviewees.

171. Targeted presentations were made to staff from the Ministry of Finance including, on at least one occasion the Minister himself, but stakeholder feedback to the TE was that the Ministry thought that 'the country wasn't anywhere near ready to consider natural capital accounting', which is rather disappointing[63], and perhaps surprising given that Green Economy was included within the Government's Medium Term Policy Framework 2011-2014. Feedback to the TE indicated that the project's presentations were 'too technical and needed to focus more on presenting the benefits to Trinidad and Tobago'. There were also changes in ministers and permanent secretaries that did not help as new relationships had to be established and project aims and results explained several times. In general, engagement with the Ministry of Finance was disappointing and rather limited – for instance, no representatives attended the final project workshop – and there does not seem to be any significant uptake of project results by the Ministry. Given that the Ministry of Finance was a relatively new target requiring a new and additional approach to communications and technical material, and that the ProEcoServ-TT team lacked a senior economist from Trinidad and Tobago for much of its life so probably lacked some credibility in the eyes of the Ministry of Finance, it is perhaps not surprising that the project's work on NCA in Trinidad and Tobago has had limited success. However, the team's efforts in Trinidad and Tobago to engage with the Ministry of Finance should be applauded, and the failure was not due to lack of effort on their part[64].

172. However, much more interest was shown by the Central Statistical Office (CSO) in Trinidad and Tobago, which like the TCPD is under the MPSD. Apart from national workshops and training organized by ProEcoServ-TT, two CSO technical staff attended a training workshop on NCA organized by the UN Statistics Division (UNSD) in April 2014 in Chile and have expressed an interest in collecting statistics for NCA on several occasions. Unfortunately, capacity and manpower at the CSO has been and continues to be limited and it would be very difficult for them, as currently organized, to add NCA to their role, as they currently struggle to undertake even their routine tasks. Indeed, at the TE stage the principal member of staff member with a keen interest in the issue who had attended the workshop in Chile was about to be reassigned to another role/area so that there would be even less capacity within CSO.

173. Despite the disappointments stakeholders confirmed that they now have an increased appreciation of the value of NCA and how to apply it (at least in theory) to support decision-making, and ProEcoServ-TT has certainly moved the debate forward on incorporating natural capital into national accounts, and can be considered a roadmap for future thinking and development on the issue. However, overall, in the TE's opinion, this element of the project was perhaps a step too far in that ProEcoServ-TT already had a large number of activities that it needed to implement with a very small project management team, and NCA should have been considered as a follow up project to ProEcoServ. Trinidad and Tobago has no experience in this area, so external donor-funded technical support with encouragement by major donors such as the World Bank, is likely to continue to be required to move the process forward.

Demonstration projects

174. The three case studies were conducted to research, test and demonstrate the value of ES, to highlight the need to mainstream BD and ES in Trinidad and Tobago and provide information to feed into DSS tools developed to support the implementation of the NSDS and other policy and planning processes. Field data collection and analysis were led by three students, as part of their research for a PhD at UWI.

[63] A project stakeholder noted 'this happened during the drop of oil and natural gas prices, which affected the TT national budget significantly'.

[64] A project stakeholder also noted that during the period of ProEcoServ there were national elections and the party that was behind the government, and originally working with the project, lost the elections and new cabinet was formed, with all the underlying consequences.

One PhD student has finished his PhD, but the other two had not completed their research by the time of the TE.

i. Tobago Buccoo Reef

175. This demonstration project aimed to map and measure shoreline protection provided by ES and also estimate carbon sequestration in South West Tobago. As Buccoo Reef is not easy to compare to other sites because of its unique shape, the study site was expanded to include the neighbouring areas of Mt Irvine and Grand Corland Bay which also possess coral, seagrasses and mangroves. It was hoped that the results of the study would allow integration of coastal ES (e.g. coastal vulnerability and resilience) into spatial planning, which is currently lacking in Trinidad and Tobago and, if successful, could be a model for use by other Small Island Developing States (SIDS) in the Caribbean and beyond (so of potential replication/catalysis value).

176. Up to the TE, two tools had been developed for this site - modeling and mapping, and scenario analysis. ProEcoServ has undertaken a bathymetric survey of South West Tobago and the project has used modeling software (alternative to InVest) to examine reef depth, attenuation of wave energy and coastal protection. A scenario analysis exercise has examined how coastal vulnerability alters with changes in ES.

177. The experiences from this case study have been of particular interest to Tobago House of Assembly (THA) officials. However, up until the TE, full analysis and reporting of results had not been delivered, and it is unclear when full relevant data sets/layers will be available and resulting policy briefs can be developed, although the PhD student responsible for the field research expects to complete his thesis in late 2016, as he is now working full time on his thesis. The ProEcoServ-TT website has very little detailed information on this element of the project, in contrast to the other case studies and national level activities.

ii. Nariva Swamp

178. Nariva is the largest freshwater wetland in the Caribbean and a Ramsar site and was designated as an Environmentally Sensitive Area (ESA) in 2006 by Trinidad and Tobago's Environmental Management Authority (so it has recognized high BD value). The research at the site examined the links and tradeoffs between agriculture and pollinators and their habitats, the connection between changes in crop yields and local farmers' incomes when pollinators are excluded, farmers' attitudes towards pollination and pesticide use, and pollinator plant preferences (so that areas of high pollinator diversity may be created). Scenario analysis was also undertaken examining the impact of changes in land use and climate on pollinators (numbers, distribution, diversity) and some limited pollination valuation work was also undertaken.

179. The research has produced some very interesting results, which have high value scientifically as well as from an agricultural policy point of view, and deserve publication and promotion as data on pollinators is largely lacking in the Caribbean and is very poor for the tropics in general, especially on the importance of non-bee species. Consequently, this research has the potential to be of considerable value across the Caribbean (and of interest globally), and when the data are fully analysed the results should be linked with the pollination ecosystem service database being developed by IPBES[65].

180. The valuation exercise was rather more introductory and speculative (therefore higher risk), and relied on estimates of the percentage of output attributed to pollination using exclusion studies (from the field research) to estimate the percentage of output that can be attributed to pollination for sample crops, mostly cucumber and peppers[66]. These were then scaled up to the national level to give an overall value, using data for other crops compiled from studies conducted on other vegetables from other parts of the

[65] http://www.ipbes.net/work-programme/pollination

[66] The pollination component of ProEcoServ was initially confined to the Nariva Swamp but was expanded to study sites in the Tucker Valley, Chaguaramas in NW Trinidad, where the crops were largely cucumber, sweet corn, pumpkin, watermelon and hot peppers, with future plans of papaya, in order to get a better understanding of pollination on a national scale.

world. Preliminary findings suggest that the value of insect-based pollination services to agriculture represented approximately 12% of agricultural GDP in 2012. These figures highlight the importance of pollination to the country and the costs of not supporting pollination as an ecosystem service, and the need for policymakers, particularly those in the Ministry of Agriculture, to consider the costs of land use change and pesticides on pollinator health.

181. The pollination results[67] need to be more clearly linked to the decision-making/policy processes, and it is strongly suggested that a targeted policy briefing aimed at decision-makers and managers in the Ministry of Agriculture (and agricultural extension officers) and the related private agricultural sector, such as farmers unions, is developed that sets out the economic case for strengthening pollination services and practical management to enhance pollination for supporting sustainable agriculture and local livelihoods. Interestingly, there has been a direct approach/linkage with a senior economist at the US Government Environmental Protection Agency, which already indicates wider interest.

182. Another (ongoing) research project has also been carried out at the Nariva Swamp, ostensibly under ProEcoServ. Carbon dioxide, methane and other Green House Gas (GHG) emissions from the Swamp are being measured as part of the Nariva Restoration Project, which is also led by the National Project Coordinator. The project aims to reforest an area of the Swamp using local community workers over a 7-year period. The emissions (reductions) are being measured using ground based remote sensing. It is anticipated that the emissions reductions achieved through restoration of the area can be sold, and The World Bank, which has part funded the research, has agreed to be the first buyer of the carbon credits. According to the National Project Coordinator, results are still preliminary but encouraging. This project is linked to Outcome 1.2.

iii. Eastern Northern Range

183. The demonstration project in the Eastern Northern Range was focused on soil retention and water purification functions of forests in the Caura and Maracas Valley, and their links with agriculture and development planning related to the Hillside Regulation (development) Policy. There have been a number of major flooding events in the Northern Range region, where the majority of Trinidad's population lives[68]. Consequently, floods are high on the political agenda and the MPSD has been committed to dealing with this issue, which offered a potential policy entry point for ProEcoServ. The carbon sequestration function and value of these forests was also examined (although not as the primary research).

184. The project modeled and mapped erosion rates from areas with different types and degrees of vegetation cover using an ecological production function based on a modification of the Revised Universal Soil Loss Equation (RUSLE), and data from the Trinidad and Tobago Forestry Department, and then extended the study to cover other areas of the Northern Range using the InVEST Sediment Retention Model. This produced maps showing soil erosion rates, deposition and regulation, disaggregated by watershed, with and without vegetation, and importantly identified priority areas to be considered in hillside planning and management. No such information/DSS tool previously existed in Trinidad and Tobago. The project also used the InVEST Sediment Retention and Water Purification models to assess the benefits of riparian reforestation, focusing on sediment, nitrate and phosphate reduction in riparian forest of different widths. According to the TCPD, this represents important new baseline information for the country.

[67] A stakeholder noted during the eview process that 'Plum Mitan, agricultural area, is one of the case studies, which is not listed here. This site was at the core for the study of pollination'.

[68] The Northern Range prevents the deposition of 6 million tonnes of soil and sediment into the watercourses of Trinidad. In absence of the Northern Range, it has been estimated that Trinidad would incur clean-up costs of up to 518 Million TTD annually, and the costs of replacing this soil lost from the range in absence of vegetation would be up to 2.2 Billion TTD per year, which represents 2.3% of GDP in 2014. Also, freshwater resources from rivers of the Northern Range are the source of approximately 70% of the freshwater used in Trinidad. Figures from the ProEcoServ-TT website and final project report.

185. The results are described in detail in the various project reports from Trinidad and Tobago (see Annex 10) and further details of the research can be found on the ProEcoServ-TT website, but a few key conclusions, from a policy point of view, are mentioned here. A key finding was that natural vegetation on steep slopes (between 30 – 50 degrees) can reduce potential erosion by as much as 95%, and that various types of natural vegetation found in the Northern Range, not just forest, can also be effective in minimizing potential erosion. ProEcoServ-TT has also shown that reforesting riparian zones can reduce sediment and nutrient inflow to rivers significantly, for those with forest buffers up to 90 m in width on one side of the river, and riparian forests help improve river/stream water quality. The results thus make a strong case for maintaining natural vegetation on the steep slopes of the Northern Range watersheds, and for reforestation of riparian zones as a priority management policy for those government agencies involved in land and watershed management in Trinidad and Tobago. Importantly, the results also offer the government authorities a wide range of practical effective reforestation policy options for hillside soil conservation, such as agroforestry, which can provide soil conservation benefits as well as other socioeconomic benefits. As n the case of Eden in South Africa, these results would be of interest to UNEP's CCSP and DCSP.

186. Feedback from TE interviews was very positive about the results from the ProEcoServ-TT studies. One comment received was that the mapping of ecosystem service values across parts of Trinidad and Tobago has been particularly useful in helping the TCPD identify areas that are potentially 'problematic' for development. However, although the results has been take up by the TCPD, and the key results of the research at the three sites are presented on the website and a series of policy recommendations are presented in the ProEcoServ-TT's final report (submitted to UNEP in October 2015), they could perhaps be better presented in specific policy briefs targeted at relevant government agencies.

Other valuation studies

187. As ProEcoServ progressed on Trinidad and Tobago, the collection of data expanded beyond these three areas, in order to address other challenges and/ or meet policy needs as they arose, including studies to assess the freshwater provision service of the Main Ridge Forest Reserve in Tobago (the oldest protected area in the Western Hemisphere), carbon sequestration services provided by four different ecosystem types (mangroves, salt marshes and swamps, seagrasses, and tropical forests) for the whole of Trinidad and Tobago, and the economic value of coastal recreation and coastal protection in Trinidad and Tobago. The team produced a series of maps from these additional studies. Aspects of economic valuation were also intended to support both the NCA exercises, and to help meet some of the data needs for the pilot PES scheme in the Caura Valley.

188. In most cases, there were little or no economic data and direct valuation could not be undertaken. Consequently, the team relied on a meta-analytical value transfer methodology[69] (also for some of the pollination valuation exercises), integrated with GIS tools, to provide a spatial assessment of the values of the ecosystem services examined. However, the range of values for coastal recreation and coastal protection services were very large, ranging between 85 and 390,428 US$/hectare/year and 3-133 US$/hectare/year respectively, and the carbon sequestration values again varied widely, between 3 and 1035 US$/hectare/year, which calls into question the usefulness of this approach for decision-making. Indeed, there was some criticism of the approach (meta-analytical value transfer methodology), and estimates by some the external economists involved with the ProEcoServ, notably the ESE Unit in Nairobi. Nevertheless, these valuation exercises can be used to illustrate the order of magnitude of the economic value of pollination, carbon sequestration and coastal recreation ecosystem services, and raise the issue with policy makers as well as arguing for further research into the science of ES in Trinidad and Tobago.

Communications strategy and products

[69] This essentially uses estimates from similar studies in other parts of the world, which may or may not be comparable. More details on methods and approaches used are given in Girvan and Teelucksingh (2012) and summarised in the ProEcoServ-TT team's final report.

189. A communications strategy (Output 2.1.1) was produced during the first year of the project and later upgraded, extended, and made more effective with better targeting (a change of communication consultant part way through helped). A considerable amount of high quality communication and outreach material was produced by the project in Trinidad and Tobago during its lifetime, much of it available on the ProEcoServ-TT's website, including some excellent downloadable briefings on the project and media materials (the best from the four countries). Also included are two Vimeo recordings[70] (also available on YouTube) of the National Project Coordinator being interviewed on national television about ProEcoServ, its aims and results in which he gives a very clear and convincing presentation of why ES are important and need to be considered by decision-makers. Although the examples relate to Trinidad and Tobago these video presentations would be very useful as base material for other UNEP ES initiatives and educational campaigns, and should be made available to UNEP's Division of Communication and Public Information (DCPI).

190. A final workshop of ProEcoServ-TT was held in July 2015, which attracted over 75 stakeholders, at which all project materials were distributed – all in soft copy (on USB digital pen drives), and some in hard copy, and were also made available online (at www.proecoservtt.org) and at other workshops (Output 1.1.6).

191. Delivery of the outputs from Trinidad and Tobago is considered partially achieved and rated as **Satisfactory**.

3.2.4 Vietnam

192. Vietnam, like South Africa, was not visited as part of TE due to a limited budget (see paragraph 438). Consequently, the information for Vietnam is based on Skype interviews and document review.

193. The main aims of ProEcoServ-VT were to: (i) support Ca Mau Division of Natural Resources and Environment and the Ca Mau National Park management authorities to integrate ecosystem services into land use planning, through a pilot ES mapping and economic valuation study (with development of valuation tools) of the mangrove forests in Ngoc Hien, the southernmost rural district of Cau Mau province, with the results feeding into land use planning policy in the Cau Mau province; (ii) raise awareness and build capacity among national and provincial decision-makers on the value of ecosystem services; and (iii) mainstream ES into the policy agenda at both provincial and national levels.

Local and provincial level – Ca Mau demonstration site

194. Two main regulating ecosystem services - carbon storage/sequestration and coastal protection – at the Ca Mau site were targeted to assess the impacts of development on these ES and to identify the areas for restoration and investment. Decision support tools were developed including ES maps (with associated spatial database), spatial analysis of drivers, tradeoff analysis, scenario analysis and valuation. The GIS mapping was undertaken using three InVest[71] models - carbon storage and sequestration, coastal vulnerability and erosion protection[72] (Output 1.1.1). These were seen as particularly valuable tools and innovative for the region. The main drivers impacting the mangrove systems at Cau Mau were identified and analysed (Output 1.1.2). Two different sets of scenarios were also developed (Output 1.1.4), which illustrated the advantage of a conservation option associated with less impacts on mangrove ecosystem

[70] http://www.proecoservtt.org/media.html

[71] The study used the InVEST model to calculate main ecosystem services in Ca Mau, including carbon storage and sequestration, erosion protection and to identify the coastal vulnerability areas. The InVEST Carbon Storage and Sequestration model aggregates the amount of carbon stored in these pools according to the land use maps and classifications produced by the user. The InVEST Erosion Protection model quantifies the protective benefits that natural habitats provide against erosion and inundation (flooding) in near-shore environments. The InVEST Coastal Vulnerability model produces maps of coastal population raster and Vulnerability Index. http://www.naturalcapitalproject.org/invest/

[72] Data provided by MONRE / DONRE were combined with satellite imagery, and global data used to fill in data gaps.

services over a development option. The study looked at the difference in land use between 2005 and 2010 and analyzed the impact on ES associated different levels of development, with the scenarios based on the Government's land use plan 2010-2020. Most of data was taken from secondary sources supplemented by expert opinion.

195. An economic valuation of the ecosystem services provided by mangroves in Ngoc Hien District, Ca Mau Province, was also undertaken (Output 1.1.3), which has fed into discussions with policy makers at provincial level. The valuation approaches are understood to have been based on market pricing approach, cost-based approach and the travel cost method. The valuation work found that the economic value of the coastal protection service provided by mangroves in Ca Mau averaged US$ 2,600 per hectare per year, some 25 times greater than the market value of timber from the mangroves, a comparison which is likely to have impact with policy makers. Working together with the Department of Natural Resources and Environment (DONRE) and Ca Mau National Park's Management Board, the ES maps, valuation figures and scenario development results were fed into the production of land use planning of Ca Mau National Park (Output 2.2.3).

196. As for Trinidad and Tobago and Chile, external technical support has been needed to map trade-offs, undertake the scenario analysis and carry out the economic valuation. A GIS team comprising largely external consultants worked with DONRE at Ca Mau to collect data, and included a consultant with a background in remote sensing and GIS, with a good knowledge of InVest (with additional input from the InVest team in Washington to refine the marine and carbon sequestration models for Ca Mau and provided training for national consultants), a consultant responsible for the economic valuation of ES and another consultant looking at scenarios[73].

197. A number of awareness-raising meetings were held in the province of Ca Mau to present the results of spatial modeling, and training on the application of InVest tools for mapping of ecosystem services in Ca Mau. A manual to guide decision makers on the utilization of DSS was also developed to aid in choosing development strategies, and various training workshops were held to build capacity to use the DSS. However, these capacity building efforts were criticised by the MTE because the training may not have been targeted at the appropriate level or people/group.

198. The DSS tools (i.e. mapping and valuation) have apparently been distributed to relevant provincial government departments in Ca Mau province, but while they were used in developing the detail for the land use planning for Ca Mau National Park it is not clear how much they have been integrated into the general day-to-day work practices of the agencies involved or whether they have been used for other initiatives at the provincial level.

199. A study that examined investment in mangroves as ecological infrastructure e.g. wave attenuation following tsunamis, and the case for restoration of this ecosystem (Output 2.2.4) was also undertaken in order to inform policy development processes in Ca Mau province. Again, it is not known what impact this has had.

200. Further details on the project's results at Ca Mau with mapping figures are given in ProEcoServ-VT's final report and the project's overall Synthesis Report.

Activities at national and regional levels

201. ProEcoServ-VT carried out a number of very successful initiatives at the national level, starting with a review of national and provincial level planning processes was undertaken to identify 'entry points ' for mainstreaming of ES approaches, which identified three main policy processes. The project team then

[73] The project team in Vietnam made the following comment on the draft evaluation report '*Since Ecosystem Services modeling is quite new in Viet Nam, we have work with a external consultant from Natural Capital Project in Washington DC to work with national consultants to provide technical support in running Invest model for calculating coastal protection and carbon sequestration services.'*

provided technical support and input to mainstream ES considerations into two important national strategies - National Strategy for Green Growth, and the National Strategy for Environmental Protection to 2020 - and project results also fed into Party Resolution n.24 NQ/TW[74] on responding to climate change, natural resources management and environmental protection (ISPONRE is assigned as the lead agency to support MONRE to develop the Party Resolution).

202. The Green Growth Strategy is particularly important as it is one of the highest policy documents of the Government and provides a framework for other sectors. ISPONRE/ProEcoServ-VT worked with the Ministry of Planning and Investment (MPI) as a drafting member for the Strategy and were responsible for ES being included in it. The Strategy's specific objectives include the environmental remediation and rehabilitation of degraded areas and a reduction in natural resource degradation so it is highly relevant for mainstreaming of ES.

203. ProEcoServ-VT produced and distributed a number of policy briefs on mainstreaming of ES through the System of Environmental-Economic Accounting (SEEA) and economic incentives for mainstreaming of ES in Vietnam. A review of pro-poor economic, regulatory and financial incentives for sustainable use of ES in Vietnam was also undertaken and guidelines produced (Output 2.2.2), which were presented to policy makers, and a manual on mainstreaming of ES was produced to guide decision makers on approaches and methodologies for ES mainstreaming.

204. The ProEcoServ-VT team was also very active in promoting the project and ES at regional level meetings and fora. For instance, the team led the development of the 'Increasing Investments in Natural Capital in the Greater Mekong Sub-region' theme for the Fourth Greater Mekong Sub-region Environment Ministers' Meeting held in January 2015. Vietnamese officials presented the experiences of ProEcoServ-VT as a 'best practice' initiative in the special session on mainstreaming at the meeting. A full list of meetings is given in the various national reports from Vietnam.

Green Accounting

205. The General Statistics Office under the Ministry of Planning and Investment (MPI) had shown interest in preparing national 'Green Accounts' but has lacked the required technical support and data to calculate the contribution of 'Green GDP[75]'. A number of initiatives have been active in this area in recent years in Vietnam and the wider region[76], and ProEcoServ-VT undertook some limited activities, largely policy briefs, to build on these. However, it has engaged in a good deal of collaboration. The project team collaborated with the MPI and World Bank (WB) in Vietnam under its WAVES initiative to draft a 'Green GDP' road map[77] for the country, examined how this and various other initiatives fit together, and how donors can help finance its development. The ProEcoServ-VT team investigated the possibility of establishing a formal link between ProEcoServ and WAVES initiatives through a global agreement between UNEP and the WB, but to date little has been done on this and the results are unclear[78]. The ProEcoServ-VT

[74] The Resolution states as part of its guiding principles that "natural Resources are the national assets, resources and important natural capital for country development. The National Resources need to be fully assessed, prized and accounted in to national economy". The Resolution is important key document to guide different line Ministries/sectors for inclusion of natural capital/ecosystem services in to their planning processes.

[75] The green gross domestic product (green GDP or GGDP) is an index of economic growth with the environmental consequences of that growth factored into a country's conventional GDP. See https://en.wikipedia.org/wiki/Green_gross_domestic_product

[76] For instance, the UK DFID has financed a WAVES Phase 1 program in Vietnam, executed by the World Bank, and coordinated by ISPONRE, and the EU has provided funding for an Information Management System (FORMIS). Other donors supporting activities in this area include KfW (forestry), ADB, WWF, and JICA.

[77] The road map is a key document in preparation stage to support Viet Nam to become Core Implementing Country (CIC) of WAVE initiatives.

[78] However, one reviewer noted that '*there is coordination of the work across the two initiatives, and the information/data is shared. Vietnam is a now a core implementing county of WAVES, and UNEP/ESE Unit is a also a partner of the this global partnership.'*

team/ISPONRE also produced a proposal to establish a Natural Capital Partnership, although UNEP was not aware of this. It is suggested that UNEP seek to link with the Natural Capital Partnership being established by ISPONRE as this would take UNEP's NCA agenda forward.

206. In addition, ProEcoServ team members have worked with the ADB under their Core Environment Program[79] helping to encourage further activities on natural capital accounting in Vietnam and in the wider Greater Mekong Subregion (GMS) as a whole. Experiences and lessons learnt from ProEcoServ on this have been shared with other GMS countries for wider replication in the region (see above), although again, specific results are not detailed in project reports so it is difficult to assess ProEcoServ-VT's contribution to furthering the uptake of thinking on natural capital in the region. However, according to ADB they have been highly welcomed and Vietnam is increasingly seen as a regional leader in this field, one that other countries have expressed an interest in learning from.

Communications strategy and products

207. A communication strategy was developed (Output 2.1.1) targeted at both national and provincial level policy makers, with policy dialogues and workshops organised to present the approach and methodology for mainstreaming ES. A number of local level awareness raising and educational activities aimed at the general public and schools around Ca Mau were held jointly with partners, such as WWF. These included an art competition for school children focused on the theme of "I love my mangrove" and a photo-competition on the importance of ecosystem services for the wider public held in collaboration with DONRE and the Ca Mau Association of art and literature. Interviewees claimed that these were well attended with many enthusiastic participants (especially children). In addition, the project produced a video on the mangrove ecosystem and its importance for ecosystem services and human welfare which was broadcast on local television to promote project's activities and raise stakeholders' awareness (the video is available on the ProEcoServ-VT website). The project team also collaborated with a number of other partners, including with IUCN on a media-training workshop ('Coastal Ecosystem Services in coastal provinces of Mekong Delta') which took place in November 2013 and was attended by 62 journalists. Unfortunately, it was not possible to interview any of the participants as part of the TE so it is not known what impact this training had and whether it was translated into specific articles by the journalists.

208. Interviewees commented that the ES approach and ecosystem management are relatively new ideas for the country and consequently awareness was initially very low and needed to be built in the first few years of the project. At the national level, project staff claimed that MONRE and MPI staff now understand the concepts, but, according to interviewees, levels of awareness and understanding among other target ministries, namely the Ministry of Finance (MOF) and the Ministry of Agriculture and Rural development (MARD), is apparently still low.

209. At the provincial level, the MTE reported that there was a low awareness and understanding of the project among key government stakeholders (e.g. Department of Forestry, Office of Peoples Committee, and National Parks Authority), that the project was considered academic, and the goals and expected outcomes were not understood. Also, a workshop was held to present the coastal vulnerability maps to provincial authorities, but it was very difficult for them to understand and interpret the maps. A 2-day training workshop on InVest was also held in Ca Mau – but the participants did not have a background in this area and felt that they gained almost nothing from it. Apparently, they did not understand the inputs to the model, how the maps were generated or what they represented. As a result, the MTE reported that there was a lack of appreciation of how to use the tools to inform decisions or policy. National level interviewees claimed that levels of awareness and understanding had improved at provincial level but the TE was not able to visit Vietnam or interview stakeholders from the provincial level (see paragraph 28), so could not confirm whether this had occurred.

[79] http://www.gms-eoc.org/the-program

210. Delivery of the outputs from Vietnam is considered largely achieved (some uncertainty over provincial level activities due to inability to interview relevant stakeholders/individuals) and rated as **Satisfactory**.

3.2.5 Global level/science & policy interface

211. According to the ProDoc, an entire component of the project – Component 3 – was devoted to global level activities. The aim of Component 3 was to '*contribute to a strengthened science-policy interface for ecosystem-conscious policy making at the international level, through engaging in an intense vertical and horizontal information exchange on ecosystem sciences tools and experiences of relevance to policy making*'. Essentially, this component was to act as a 'bridge' between the results and practical lessons generated by the project at national and transboundary levels to the 'international agenda setting arena' and to make the ProEcoServ 'visible', feeding the results into the global debate on ES. Consequently, this component has largely dealt with communication and dissemination of project results and key messages between the various stakeholders and levels over which the project has operated. However, Component 3 was not well described in the ProDoc or given very much thought at the design stage and has consequently suffered from a lack of direction to some extent.

212. The three key sets of activities were to include: (i) the organisation and facilitation of exchange among the national project teams through site visits, joint tool development, data and experience exchange, joint workshops and seminars; (ii) the engagement of project staff with international experts in the area of ecosystem services so as to increase learning and knowledge about implementation challenges and opportunities; and (iii) participation in international fora to promote tools and knowledge gained through ProEcoServ experiences.

Organisation and facilitation of exchange – horizontal and vertical transfer

213. Formal 'horizontal exchange between national project teams (Output 3.1.1) was rather limited and focused on the annual 2-3 day global PSC meetings, where project progress in each country was presented and reviewed and experiences shared (these events also offered some opportunity for individual discussions and networking) but outside of these meetings there was little communication directly. Attempts were made through an email list but this was not successful (a common failing in multi-country/multi-regional projects), largely because of the difficulty operating across the large time differences, a mix of languages and, in the case of ProEcoServ, because most countries did not have many activities in common.

Engagement of project staff with international experts in the area of ecosystem services

214. Engagement with international experts (Output 3.1.1) occurred through meetings with consultants as part of specific workshops, e.g. on NCA in Trinidad and Tobago, as well as through invitations for international experts to attend PSC meetings, usually tied to a specific day for training. Involvement of the external experts was usually arranged through the UNEP ESE Unit's network, and was seen as very helpful by Vietnam and Trinidad and Tobago, and an 'added value' of having UNEP as the GEF Executing Agency (see paragraph 366). TE interviewees had particular praise for the external consultants engaged to deliver training and technical advice on SEEA, NCA and PES in Trinidad and Tobago. In contrast, in Chile most of the 'expert' input was organised through CEAZA mostly involving their own staff, and the South Africa project team felt they already had sufficient expertise within the main institutions involved (CSIR and SANBI), or others they could call on within South Africa (capacity is high in South Africa). Indeed, South Africa is considered a world leader in the field of ES assessment, management and mainstreaming and it had been hoped that South Africa would act as a 'mentor' for other countries but the anticipated exchange between the teams in South Africa and Chile originally identified at the design stage did not take place due to a change in the executing body in Chile by the Government of Chile after implementation started (it was not

viewed as necessary, although in the TE's opinion there would still have been beneficial at least from Chile's point of view).

Participation in international fora to promote ProEcoServ tools and knowledge

215. As mentioned previously, Component 3 was not well defined at the design stage. Consequently, early in implementation the Global Project Manager suggested commissioning a study to map out relevant international initiatives and processes and identify entry points and needs to facilitate efficient mainstreaming of the project's key messages and products among international bodies and initiatives operating in the arena of BD and ES (vertical transfer). However, UNEP managers rejected this idea and instead it was decided to undertake the work internally, with the Project Manager leading on outreach activities to CBD, IPBES[80], TEEB, and IUCN, and the global communication strategy (Output 3.1.2) was developed around this.

216. The PMU/ESE Unit established linkages with, and gave presentation of results to, a number of international bodies, chief of which were IPBES (multiple contributions), OECD (text drafted for the DAC Network on Environment and Development Co-operation (ENVIRONET)), UN Stats Commission (who have shown an interest in compiling standard national accounts which would include environmental/ES statistics), Valuation and Accounting of Natural Capital for Green Economy (VANTAGE) programme, Wealth Accounting and the Valuation of Ecosystem Services (WAVES, including a member of the PSC so close relationship) and the Green Growth Knowledge Platform (which has used some ProEcoServ findings). However, these linkages with other relevant processes and projects has been limited judging from the indications given in the Project Document, and uptake perhaps less efficient than it could have been at the international scale, although there have been a significant number of scientific publications resulting from the project (see Annex 10) and other scientific articles do reference the project[81].

217. UNEP staff based in Nairobi also gave a considerable number of presentations on the project results at many high profile international meetings (Output 3.1) throughout the life of the project. These are listed in the annual PIRs, and include: the Rio+20 Sustainable Development Conference, in Rio de Janeiro, Brazil held in June 2012 (side event on "Natural Capital and Economic Development: Bridging or Breaking?)[82]; a TEEB Conference in Germany in March 2012; and the World Ocean Summit in June 2015. However, according to some non-UNEP interviewees, these meetings were not very effective at spreading the results of the project, and despite some articles on the project in the international press, including a piece in Time Magazine by the Executive Director of UNEP and mention in GEF reports, along with speeches by other organizations which included mention of the project (e.g. by the Executive Director of CBD), the project was viewed as having a 'rather low profile' internationally by evaluation interviews despite UNEP's promotion of the project as one its 'flagship' projects. However, it should be noted that countries, such as Vietnam, did participated in number international for a, e.g. Vietnam in GMS Ministerial Meeting.

218. Surprisingly, there was relatively little involvement within UNEP beyond ESE Unit – some linkage with the Division of Technology, Industry and Economics (DTIE) but no significant involvement of UNEP's Division of Environmental Law and Convention (DELC) which could perhaps have helped feed results more effectively into the MEAs, given DELC's remit and network (although a number of CBD documents do reference the ProEcoServ project[83]). Indeed engagement by ProEcoServ with the MEAs was rather

[80] One reviewer noted that *the project coordinators for South Africa and Trinidad and Tobago are Coordinating Lead Authors of different chapters in the IPBES Global assessment now in progress and their experience in ProEcoServ will likely have an influence on the development of these chapters.*

[81] For instance, http://www.oecd-ilibrary.org/development/biodiversity-and-development-co-operation_5js1sqkvts0v-en

[82] The event showcased how ecosystem services can be integrated within conventional development planning and processes, using examples from Trinidad and Tobago (integrating ES in nationwide land use planning and into national accounts), and Vietnam (valuation of mangroves' importance in national economy).

[83] Such as https://www.cbd.int/financial/pes/g-ecosystemservices-bsr.pdf

superficial, which is reflected in comments by some external interviewees were that project is 'poorly known' at the global level (despite presentations at meetings). Although there are some positive examples, such as the connection with TEEB, 'horizontal' dissemination within UNEP was found to be surprisingly poor, with many UNEP colleagues having a very superficial awareness of the project ("ProEcoServ is seen as a 'DEPI' project"). Indeed, even within DEPI there was relatively little knowledge of results and products even among non-ESE Unit colleagues who were working in green accounting and ecosystem services issues, which is surprising given it is marketed as one of UNEP's 'flagship' projects in UNEP's literature.

219. In the TE's opinion, an updated scoping paper that maps out relevant international bodies, processes and initiatives (including other UNEP and UN-funded projects and initiatives, including UNDP Country Programme Document processes) operating in arena of BD and ES for mainstreaming project results, as originally suggested would still be valuable to better mainstream results and improve impact of the project at the international level. This should involve input from DELC, and the Subprogramme Coordinators from the EMSP, Climate Change Subprogramme (CCSP) and the Disasters and Conflicts Subprogramme (DCSP). Included in this work should be a brief analysis of how the ProEcoServ results and other GEF mainstreaming projects implemented by UNEP relate to the recently agreed SDGs in each country and their international obligations, and UNEP's work on the SDGs (SDG 14/16 – BD/CC, Goal 8 – inclusive green economy in particular). This would also be useful in developing an approach/template for how to analyse other UNEP-GEF projects in the light of the SDGs and be useful for reporting to GEF which also needs to demonstrate the contribution of its portfolio to the SDGs. This would also help to support one of the drivers identified in the ToC ('*Increasing attention to ecosystem management and ecosystem services approaches, including PES schemes and SGAs to further the MA agenda, in relevant international processes, e.g. CBD, UN-REDD+, to which UNEP and participating national governments have made long-term commitments (and resources*)'). It would also be important to analyse how the ProEcoServ results fit within the larger landscape of the UNEP's work on ecosystem services (both within the GEF portfolio and its Subprogrammes and associated Programme of Work). As a general point, it would be worth including such an analysis at the design (PPG) stage for future UNEP-GEF projects.

Recommendation 2. *It is recommended that a scoping paper is produced that maps out relevant international bodies, processes and initiatives (including other UNEP and UN-funded projects and initiatives, including UNDP Country Programme Document processes) operating in arena of BD and ecosystem services for mainstreaming project results, in order to improve the uptake and mainstreaming of project (and other ecosystem service related project) results at the global level, especially the target economic tools Included in this work should be a brief analysis of how the ProEcoServ results relate to the recently agreed SDGs in each country and their international obligations, and UNEP's work on the SDGs. Also as part of this it is suggested that a review meeting of all ecosystem services focused projects in UNEP's portfolio (both GEF and non-GEF funded) projects that have been delivered in the last 5 years, e.g. ProEcoServ, Uganda PES, Bulgaria-Romania PES, etc, is held to draw out common experiences, good practices and practical lessons learns on how to value, promote and mainstream ES into national and local level decision-making, to identify what worked and why and (as important), what did not and why. This should result in a specific publication. The meeting should focus on the project teams rather than inviting 'global experts' not directed involved with the GEF projects. This recommendation will require additional funding, which needs to come directly from UNEP; it should not be treated as a priority for funding using the remaining GEF funds (other recommendations are more pressing, as indicated).* ***Responsibility****: This should involve input DEPI, DELC, SubProgramme Coordinators from the EMSP, CCSP and DCSP but led by the UNEP ESE Unit in Nairobi, other relevant units in DEPI, UNEP GEF Coordination Office, GEF Task Managers, as well as project teams (mostly individual project managers), and coordinated by the EMSP Coordinator at UNEP.* ***Timeframe****: Before end of June 2017.*

220. Overall, the identity of the project at the national level has been rather better than global level, and project results more likely to be useful.

Communication strategy and products

221. As mentioned above, communications and dissemination activities were to have formed a core focus for the project and included: development of a Global Communications Strategy (Output 3.1.2) and a global newsletter (but only a few early editions then abandoned), and a number of project flyers and fact sheets. An ES Talk podcast involving some of the members of the Global PSC was also introduced but only 3 talks were ever produced. Social media were also employed as channels, but do not seem to have been updated recently (last entry for Facebook was June 2014), although a number of presentations on the project by UNEP staff and invited speakers to the project's final workshop (see below) are available on YouTube. A very good clear presentation of the initial results and lessons learned from the project (in October 2014) was given as a SGA Network webinar titled 'Mainstreaming ecosystem services into development policy: lessons learned from the Project for Ecosystem Services (ProEcoServ)' is also available online[84]. A website for the overall ProEcoServ project was established (www.proecoserv.org) to share information and report results, managed by the PMU at the ESE Unit in Nairobi, but this has not been operational for some months. Each individual country also developed its own website (all of which were still functional during the TE).

222. The output of technical publications by ProEcoServ has been excellent. At project closure, over 90 technical reports or scientific publications had been produced and disseminated through the project (and more were expected), which is a very significant achievement for a GEF project. Pilot country specific publications have included: 'Risk assessment approach in Eden' (South Africa); 'A methodology for incorporating ecosystem services into national accounts of Trinidad and Tobago' (Trinidad and Tobago); and 'Valuation of mangroves system in Ca Mau, Viet Nam'. Publications aimed at the global level have included: 'Ecosystem Services and the Macroeconomy: A Review of Linkages & Evaluation of Analytical Tools'; 'Integrating Ecosystem Services in Strategic Environmental Assessment: A guide for practitioners'; and 'Review of SGA and other relevant studies on biodiversity, trends and main direct and indirect drivers of change, valuation approaches, current strengths/weaknesses on decision-making tools/systems at the municipal and regional level'. The ProEcoServ team can certainly be said to have made a significant contribution to the state of knowledge on ES assessment, valuation, decision-tool development, and mainstreaming.

223. The national reports have also been used as the basis for the chapters of a proposed book on *'Mainstreaming Natural Capital into Development Policy and Planning: Evidence from the Emerging Economies'*, that is to be published by Routledge, with drafting and editing coordinated by the ESE Unit at UNEP with 6 of the 13 proposed chapters resulting from the ProEcoServ work carried out in the four countries. However, the TE understands that there have been delays over the delivery of individual chapters and it is not clear what the status of this publication is and whether it will be eventually published.

224. The project and its results have also been reported in the international press, including a high profile article in Time magazine in October 2015[85]. However, it is difficult to determine how much of a direct impact coverage by the media has had as impact was not measured by the project. The project has also been highlighted on the World Bank and Natural Capital websites and in CBD COP11 documents and TEEB training modules, and specifically referenced by the GEF in their annual monitoring review for 2014[86].

225. It should be noted that two sets of communication strategies were prepared by the project operating at different levels - a 'systematic outreach and dissemination strategy on ecosystem services' developed and executed in the four participating countries (Output 2.1.1) and an outreach strategy developed to engage with policy platforms on ecosystem services (Output 3.1.2), e.g. BD-related MEA

[84] https://vimeo.com/109215603

[85] http://time.com/4065215/environment-price/

[86] GEF Secretariat (2015). GEF/C.48/03 Annual Monitoring Review (AMR) 2014: Part II.

COPs, IPBES, IHDP, GLOBE, TEEB). However, how these two outputs related to one another is not clear from project documents from interviews.

Final project meeting (September 2015)

226. A final project meeting took place at UNEP in Nairobi on 28-29 September 2015 which aimed to discuss the major findings of the project, share knowledge gaps and challenges, and develop and agree a plan for follow-up.

227. In terms of deliverables from this meeting, the expected outcomes: (i) an action plan on mainstreaming of natural capital into development decisions; (ii) a strategy paper on engagement with donors, private sectors and NGOs; and (iii) a schematic outline on linkages of natural capital and the SDGs. None of these were produced by the end of the 2-day meeting; the action plan (i) has not been delivered and there has been only preliminary work on strategy paper (ii) and links to SDGs (iii). In the TE's opinion, no more time should be invested in (i) or (ii). However, an important and potentially significant way to raise awareness of the value of ecosystem services (and promote the ProEcoServ results) would be demonstrate their linkage with the SDGs (iii) and to highlight what practical tools have been developed to help deliver the SDGs (for recommendation see above).

228. Feedback on the meeting by TE interviewees was rather mixed. Participants from all four countries viewed the meeting as not especially helpful to them in showcasing and reviewing their work and experiences from the previous 4-5 years. Overall feedback was that insufficient time was given to results and exploring and discussing key findings, lessons learned and agreeing potential follow-up, within the 20-minute slot each country was given to present the results from their country, and instead too much time was given for presentations by non-ProEcoServ attendees on more general themes.

229. Whilst the meeting had value – it offered the opportunity for a broader perspective and discussion on ES and NCA – according to interviewees it was not what the four countries had expected[87]. Several country interviewees commented that there had been an expectation that the meeting would be more focused around the participants from the four countries with the aim to identify and discuss key lessons learned from each country, with the production of some form of guidelines on how to operationalise the ES approach in practice as a tangible product of the meeting. Several suggestions were made at the third PSC meeting held in Vietnam the year before (2014) on the format of the final project meeting such as a 1-1.5 day workshop or a much larger international meeting (suggested by a member of the PSC) but no decision was apparently made at that meeting (the TE received conflicting reports from interviewees on this). In the end, the UNEP ESE Unit organized the final meeting at UNEP in Nairobi in the form of a large international meeting with key figures in the field along with ProEcoServ team members and countries represented.

230. Given the mainstreaming focus of the ProEcoServ project in South Africa, the excellent analysis of lessons learned from their experiences by the ProEcoServ-SA team, the final meeting (which was not a PSC meeting) in Nairobi could have been used much more as an opportunity for the ProEcoServ project teams to better identify and capture lessons from the experiences of the whole project. In the TE's opinion, there would still be a value in undertaking a joint lesson learning exercise, although it is recognized that it is now well over a year since most of the national team members finished their work on the ProEcoServ and most have moved on to other things.

ProEcoServ's Synthesis Report

231. No overall final project report, covering also the global level activities, was produced for ProEcoServ, as is common for GEF projects. However, a key deliverable for the last 10 months of the operational life of the project (so most of 2015) was the production of a 'Synthesis Report'. This was intended for national agencies and conservation and development bodies not the national partners. The

[87] This finding is contested by UNEP stakeholders who stated that there was an agreement regarding the meeting objectives

Report summarises the main results and aimed to set out the main lessons learned from the pilot countries based on information presented in the final national reports submitted to UNEP ESE Unit in Nairobi (except for Trinidad and Tobago whose final report was too late to be included so other material and reports were used for the Trinidad and Tobago chapter instead).

232. A template for the final national reports was sent to each country focuses on results and lessons learned. However, the quality of the four reports is rather mixed (South Africa is excellent, Vietnam and Chile much less so) and consequently the Synthesis Report is also of rather mixed quality and focus. For instance, in the case of Vietnam, there is a detailed presentation on the equations and calculations for the economic valuation of various ES provided by the mangroves at Ca Mau could perhaps have been presented as an annex as it is rather technical and written more in the manner of a research paper.

233. The Synthesis Report is structured around country chapters and largely repeats (with some editing) the final national reports submitted by countries, but it could perhaps have followed a different format with a focus on more practical lessons, structured around project experiences (negative as well as positive) of developing and using the various tools and approaches, e.g. mapping based valuation, scenario analysis, co-production of knowledge, and the project's experiences of the mainstreaming process itself with government and the private sector (again what worked, and what didn't) and illustrated by case studies from the different countries. Thus it could have been produced more as a 'cookbook' with 'recipes' for different approaches across a variety of ecosystems and political, institutional, legal and social situations. This might be have more impact and use to the technical staff and decision makers who were envisaged as the end users as the response from most interviewees was that either they had not read the Synthesis Report, or they had looked at it briefly but didn't feel it would be that much use in their day to day work ("it's more an information document" as one interviewee put it).

234. Delivery of the outputs for the global level/science and policy interface component of the project is considered largely achieved and rated as **Satisfactory**.

235. The overall rating on the delivery of ProEcoServ's outputs is **Satisfactory.**

3.3 Effectiveness: Attainment of objectives and planned results

3.3.1 Achievement of immediate project outcomes as defined in the reconstructed ToC

236. GEF projects aim to achieve outcomes that lead eventually to the desired changes and impact. Consequently, the evaluation of the project's effectiveness is based on the extent to which its outcomes, as defined by the reconstructed ToC, were achieved.

Immediate Project Outcome 1: Improved availability of technical capacity (tools, systems, information, trained staff) to decision- and policy-makers to analyse how policy and management decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors in the pilot countries (strengthened capacity, Outcomes 1.1, 2.2)

237. ProEcoServ has significantly increased the technical capacity available to decision-makers in the four pilot countries to make better, more informed decisions with regard to development choices and apply suitable ecosystem management tools within sectorial planning frameworks and macroeconomic planning models. The project has produced a wide range of systems, models, tools (including maps), and new data (databases, reports, papers and presentations), guidelines, and manuals, policy briefings and other sources of advice, for assessment, valuation and mainstreaming of ES into decision-making that are now available to decision-makers and technical staff advising government policy makers.

238. Numerous national and global (mostly associated with PSC meetings) training workshops and targeted webinars (detailed in national and global reports) have been held reaching many hundreds of

people in the four countries[88] to enable users to deploy the various forms of DSS developed. Interviewees from all four countries valued these efforts and this has clearly been one of the more successful aspects of ProEcoServ. Indeed, the project's focus on training and outreach with the relevant ministries and other key stakeholders has helped to establish a core group of primary stakeholders in key environment and planning agencies, although there are questions over the long-term availability of this capacity due to the usual reasons such as staff moving to other jobs. Interviewees reported an increased appreciation of ES approaches and how to use DSS tools to support decision-making. The TCPD in Trinidad and Tobago, for instance, clearly see the potential of the tools developed and piloted through ProEcoServ-TT. There were also a number of post-workshop assessments in Chile, South Africa and Trinidad and Tobago, which showed increased levels of perceived capacity and confidence of participants (e.g. in Chile surveys showed a 24% increase in self-reported 'self-efficacy').

239. Particularly successful examples highlighted by interviewees were approaches and tools developed in South Africa on disaster risk mitigation at Eden and water resource management at Olifants, the mapping and valuation work undertaken by the team in various ecosystems in Trinidad and Tobago that has significantly increased the capacity of the TCPD with regards to land use planning (although there is still a need for increased training in the InVEST models), and the maps and valuation models developed for the Ca Mau National Park in Vietnam. More locally, capacity of small local groups has also been built through the project, although sometimes in ways not anticipated by the ProEcoServ project designers. For instance, training given to members of the Caura Valley Village Community in Trinidad and Tobago to help them contribute to a proposal to establish a PES scheme in the area (see section X.X) has, according to the committee, helped them with proposals and advocacy work on other issues. The TE also came across individuals who had a heightened appreciation of the role that other policy support tools can play in ES management and interested to learn what other possible tools might be available for addressing other concerns related to environment and development. In other words, stakeholders have begun to see the potential in the use of DSS tools.

240. Another important capacity building result of ProEcoServ has been the creation of new networks to improve data, tools, capacity, collaboration and coordination on ES issues, ecosystem management issues and development planning (not identified as a target at the design stage but nevertheless a significant project outcome). For instance, the work at Eden in South Africa has led to the (provincial level) Eden Disaster Resilience Learning Network[89], which coordinates ecosystem-based approaches to disaster risk reduction in the area, and includes a wide range of stakeholders, including the provincial and municipal authorities, NGOs and corporate partners in the insurance, timber, and beverage sectors. Similarly, ProEcoServ-SA work in the Olifants catchment also helped to establish a national-level Freshwater Ecosystem Network, with high-level endorsement from DWA and DEA, and hosted by SANBI. The network aims to strengthen the technical ability of members to participate effectively in the Classification of Water Resources process, especially in the integration of FEPAs maps and other freshwater ecological infrastructure (see paragraph 138). It also aims to build links with biodiversity peers who are playing similar roles in different catchments, in order to share experiences (so offers a potential route for replication of ProEcoServ results).

241. Whilst the ProEcoServ's capacity building efforts, focused on workshops, have been useful and well-received, many interviewees recognized that a longer-term approach was also needed. Of the four countries, Trinidad and Tobago, as a Small Island Developing State (SIDS) tends to be particularly impacted by capacity issues. One suggestion to help address this is if the Green Fund could consider funding targeted

[88] For instance, a two-day training session on InVEST was run by the Stanford University's Natural Capital Programme, at the ProEcoServ inception workshop in Nairobi in June 2011, to provide the national teams with a set of ecosystem services valuation tools that are readily applicable at national and local scales. Most country teams used InVEST models at some point.

[89] The Eden Disaster Resilience Learning Network is currently establishing a data portal, on South Africa's Risk and Vulnerability Atlas website, for sharing data and information with local authorities, businesses, and beyond (http://www.rvatlas.org/).

long-term capacity building which would be in its own interests as it will need individuals with technical experience in ES if it wishes to develop a portfolio of projects with a ES/PES focus. Another suggestion proposed by an interviewee was the creation of a Masters (MSc) course in environmental economics at UWI (again perhaps funded through the Green Find). While this is beyond a GEF project, interestingly, the Trinidad and Tobago National Project Coordinator's approach to capacity building has been to use PhD students likely to remain in the country to undertake much of the basic research of the ProEcoServ-TT so they gained valuable practical experience that will be (it is hoped) available for future initiatives on Trinidad and Tobago. However, whilst this makes sense from a long-term perspective, the use of PhD students to deliver results within the demands and limitations of a 4-year GEF project (which generally take 12 months just to get up and running, and the ProEcoServ was no exception), is not an effective strategy for generating data quickly to answer urgent policy questions.

Immediate Outcome 2: Increased awareness and understanding among targeted stakeholders (government authorities, private sector, ES users and suppliers) of the value of and opportunities for integrating ES management considerations into policy making and planning processes in the pilot countries (increased awareness, Outcome 2.1)

242. ProEcoServ has had a particular focus on raising awareness and understanding of the value of ES and need for ES approaches into policy making and planning processes, reflected in its communication strategies and outreach work at both national and global levels. It has been aided in this by reviews of policy and planning processes early on in implementation in each of the four countries (but not globally – see paragraph 215) to identify 'entry points' to target with awareness-raising activities. Thus most of the project's awareness-raising activities have been well targeted, specifically at decision-makers, e.g. a two-day national Ecological Infrastructure Dialogue in November 2012 for policy makers, natural resource managers, business and civil society in South Africa, although there has also activities targeted at the general public, such as at Ca Mau in Vietnam and at SPA with schools at SPA in Chile. In addition, the project has fed some excellent campaigning work on water issues undertaken by WWF in South Africa, an example of providing others with a similar agenda with material in which to promote common ideas.

243. There were (simple) attempts to quantify raised awareness. Baseline and follow-up surveys were undertaken in South Africa and Trinidad and Tobago which showed an improvement in awareness and understanding of the concepts of ecosystem services and related terminology. Understanding of terms like 'ecosystem services', 'natural capital' and 'ecological infrastructure' showed large improvements among respondents after the project activities, and the use of such terminology was found to have increased across government departments and the private sector in both South Africa and Trinidad and Tobago. However, these were not followed up at a later date, say a year after the awareness raising/outreach activity, to assess retention of knowledge.

244. Other evidence can be seen in the uptake of results produced by the project and the way stakeholders interacted. A particularly good example is from Eden in South Africa, where unconnected stakeholder groups from the private and public sector came together around the topic of ecosystem-based management for disaster resilience. The shift in how the issue of disaster was framed – from a focus on climate and disaster response to one on ecosystem management for disaster risk reduction – indicates a shift in understanding on the role of ecosystem services in disasters. What is especially interesting about this case is that the major groups – private insurance sector, municipal authorities, research scientists and NGO community – all had quite different frames of reference and perceptions of what was importance to begin with and uneasy mistrust of the other groups when the process started. A similar situation occurred at SPA in Chile, where the debate over water extraction has changed since the ProEcoServ-CL team showed that there was little change in stream water levels over the years (so no depletion due to current water extraction). The situation is similar with respect to tourism, where community members interviewed at SPA, Chile, revealed that they now understood better how tourism numbers and dynamics can affect ecosystems and tourism attractions and the potential damage it can cause which may eventually wreck

their livelihoods. Also, in South Africa, the uptake of the message of ecological infrastructure and its incorporation into several national policy processes, such as Strategic Water Resources Areas and proposal for an additional investment in a large programme on restoring ecosystems for water security (see paragraph 144), strongly suggests a fundamental shift in awareness and understanding of the links between ecosystems and broader development issues including disaster management, development planning and infrastructure planning.

245. Another indication of increased awareness has been requests for information and support through the project following outreach activities. For instance, in Trinidad and Tobago, the Green Fund has indicated an interest in looking into supporting PES development and would very much like to develop a programmatic approach to promoting uptake of ES within environment management through the Fund and the CSO is keen to see NCA included in its own work programme (although capacity issues limit this).

246. The Vietnamese team can be considered particularly successful in their awareness raising efforts, given the very low baseline at the start of the project - ES was a relatively new concept in Vietnam - and the ProEcoServ-VT has done an excellent job of generating awareness and interest in national government which has resulted in ES being included in three key policies (see paragraph 201 and subsequent paragraphs). In addition, Vietnam has promoted project results beyond its national borders, which has attracted the interest of other countries in the region, particularly on natural capital. For instance, in May 2014, ProEcoServ-VT organized a "Policy Dialogue on Mainstreaming Natural Capital into Development Decision: Bringing Environment into Center Stage" in collaboration with the Asian Development Bank and the Hanns Seidel Foundation to share approaches of mainstreaming with other partners. Also, the "Greater Mekong Sub-region Workshop on Implementation of Sustainable Development Goals – Bringing Natural Capital into Center Stage" was organized in 2015 in Hanoi with participation of more than 100 participants from development partners, government officials, NGOs, research institutes. As mentioned earlier, the ProEcoServ-VT team is considered to be 'champion' of the natural capital approach in the region (see paragraph 204).

247. However, there are examples where the project has not had the success it hope, particularly the failure to fully engage with ministries of finance, such as in Trinidad and Tobago (see paragraph 171).

Immediate Outcome 3: Increased involvement of stakeholders (government authorities, private sector, ES users and suppliers) in decision-making frameworks that use or impact ecosystem services in the pilot countries (increased stakeholder participation in decision processes, Outcome 2.1)

248. Improving participation of stakeholders in decision-making frameworks has also been an aim of ProEcoServ, particularly through its co-production[90] approach to developing knowledge and tools and capacity building training workshops (see above).

249. All the countries employed this approach to some extent, but it was particularly stressed at Eden in South Africa and SPA in Chile. At SPA in Chile, for instance, workshop participants helped to identify and weight information on spatial factors to determine areas of ecotourism potential around SPA, helped to develop models for water provision and ecotourism using the *Tableau* software, jointly identified and discussed trade–off matrices for both ESs, identified and reviewed scenarios for SPA, including the design of guideline materials on scenarios, and helped identify potential SMEs for engagement with other ES projects. Interviewees commented that this engagement has (among other things) helped build their ability

[90] Knowledge co-production is defined as 'the collaborative process of bringing a plurality of knowledge sources and types together to address a defined problem and build an integrated or systems-oriented understanding of that problem'. Knowledge co-production approaches move beyond the traditional view of knowledge being produced by researchers and then 'transferred' to users. It prescribes a more iterative mode of working where researchers, decision makers and other users of knowledge participate on an equal footing towards shared understanding of concepts, and co-evolution of common purpose, intent and action. See Armitage, D., Berkes, F., Dale, A., Kocho-Schellenberg, E., & Patton, E. 2011. Co-management and the co-production of knowledge: Learning to adapt in Canada's Arctic. Global Environmental Change, *21*(3), 995-1004.

(confidence, knowledge, skills) to better engage with other processes. For instance, at SPA in Chile, members of the Consejo de Pueblos Atacameños (Council of Atacameño peoples, CPA) commented that they have been able to more effectively take part in recent public meetings to decide on whether solar energy schemes will be introduced to the Salar de Atacama region, and are much more confident in negotiations with the local mining companies over water rights. According to interviewees, the CPA (and other local groups) are much more organized and focused and 'can understand the language' of the proposers/developers, having been involved with the ProEcoServ workshops and awareness-raising events (an example of catalytic capacity).

250. Similarly, in Trinidad and Tobago the project has enabled to members of the Caura Community in the Northern Range to play a more active and effective role in discussions about water provision to downstream communities, and in Tobago, members of the THA have apparently been helped in their discussions over a future path to sustainability through participation in ProEcoServ-TT.

251. The project's general support for the creation of new networks interested in ecosystem services, and the involvement of new sectors and stakeholders from the development, private and planning sectors has also helped to increase and empower stakeholders and to participate in decision-making frameworks.

252. In South Africa the co-production of knowledge brought significant buy-in and may be one of the reasons why the main stakeholder groups – research institutions, private sector partners from the insurance and beverage sectors, NGOs, together with local and provincial government agencies – that generally do not interact, and were initially suspicious of each other views, were so successful in jointly agreeing measures to address the disaster risks facing the District through an ecosystem services approach. The results at Eden have been well captured in reports produced by the ProEcoServ-SA team but more detail on the framework, approaches, processes and tools used to build these relationships (which took time to establish) between the main groups would be worth documenting more thoroughly and disseminating widely.

Lesson 3. Knowledge co-production can be a powerful collaborative approach that can help create cross-scale perspectives and linkages, and build shared ownership and long-term commitment from stakeholders to a project. This was found to be particularly successful in South Africa and Chile.

Immediate Outcome 4: Increased availability of data on the science and economics of ecosystem services that can be accessed by decision-makers involved in international BD, ES and development related processes (increased availability of information for international arena, Output 3.1.1 and 3.1.2).

253. Component 3 focused on making information on ES and the project's results available on the international level and it was relatively successful in this, reflected in the large number of publications produced either by the ESE Unit in Nairobi, or channeled through the PMU from the individual countries, with the main publication being the Synthesis Report produced by UNEP (see Annex 10). Indeed, there are still a number of research publications outstanding from the ESE Unit and national partners, which will present various aspects of the project's results all of which, once published, would be widely available to decision-makers.

254. However, much of the output from the project at the international level is rather technical and lengthy (e.g. Synthesis Report) and it is unclear whether it is in a form that will appeal or be readily useable by global level policy makers[91]. The lack of a rigorous analysis of relevant international processes, programmes and projects into which ProEcoServ results should be mainstreamed (with key 'entry points' and needs identified) mentioned earlier (see paragraph 215), has meant that there has not been a good understanding of exactly what project results should be promoted to which international

[91] *One reviewer noted that the project was also covered in a one-page article in UNEP's 2015 Annual Review, produced in collaboration with UNEP DCPI colleagues.*

processes/programmes/projects in what form, through which mechanisms, with what resources, etc., and potential recipients do not appear to have been asked what they need and in what form. Although there are some exceptions, including some good recent infographics developed jointly with the DCPI in Nairobi, the tendency has been for the project to seek to publish results as academic papers and reports, which is partly a reflection of the nature of most of the executing bodies involved (scientific research institutes) and interests of the managers at the ESE Unit, rather than to tailor them to end users at the global level which would have required a much deeper collaboration with the target processes and groups.

255. There also seems to have been limited discussion and reporting on linkage of some of the knowledge databases established as part of the project with other relevant databases to make the results more widely available to the international community. The best example is perhaps IPBES, where some of the project team members (national project leaders) were already part of IPBES working groups, prior to their involvement with ProEcoServ, so could facilitate transfer of relevant information from the project to IPBES processes[92]. For instance, the project has contributed to the on-going development of a catalogue of policy support tools.

The rating for overall achievement of outcomes is Satisfactory.

3.3.2 Likelihood of impact using the Review of Outcomes to Impact (ROtI) approach

256. Demonstrating changes in biodiversity and habitat status and ecosystem service provision is unlikely in a typical 3-4 year GEF project (and significant threat reduction also usually difficult), as natural changes in biological populations and ecosystems usually operate over a longer timescale. Consequently, the project's final desired impact is not immediately realizable within the time frame of the project (although the general direction may be determinable), so the reconstructed ToC is used to determine the likelihood of achieving this desired impact in the future. Consequently, the ROtI approach is used to assess the likelihood of impact by building upon the concepts of Theory of Change (see paragraph 74). There are a number of intermediate stages/results beyond the project's outcomes in the causal pathway that need to occur for the realization of the project's final desired impact.

Medium Term Outcome 1. Ecosystem services approaches, tools, systems and knowledge are fully integrated into policy, legal and planning frameworks and used to guide macroeconomic and sectoral planning (Outcomes 2.2, 3.1 but also includes Output 2.2.3)

257. The project has had some good success in getting ES approaches adopted as a government policy and planning frameworks for disaster management, water resource management, infrastructure development and investment, and land use planning in South Africa, Trinidad and Tobago and Vietnam, which is very encouraging, and for which the project deserves praise as it is often a challenge to get technical findings (especially if seen as academic) mainstreamed into government decision-making processes. However, the degree of success in mainstreaming project results has varied between countries. In addition, it should be noted that it is usually difficult to attribute policy changes to a specific project (such as ProEcoServ), as projects are generally not referenced and there are also likely to have been many other similar initiatives operating concurrently (which is the certainly the case with the ProEcoServ). However, ProEcoServ has been specifically referenced and credited (in correspondence at least) for promoting the decision to adopt ES approaches and associated tools in some cases. It should also be remembered that ProEcoServ was built on well-established work on ES, particularly in South Africa, and its results are therefore best seen as just the most recent end points of a series of activities contributing to a long-term process of hoped for change.

South Africa

[92] *See* http://www.ipbes.net/sites/default/files/downloads/IPBES_3_INF_8.pdf

258. ProEcoServ-SA has been very successful at mainstreaming project results into a range of policy processes including: the National Development Plan and its Implementation; the National Infrastructure Plan; review of the Disaster Management Act; Review of the National Water Resources Strategy (NWRS); Review of the Water Pricing Strategy; and Classification of water resources.

259. The first of these - South Africa's National Development Plan (NDP) - was finalised during 2012, and Chapter 5 on ensuring environmental sustainability now includes explicit mention of ecosystem services, and the concept of 'ecosystem infrastructure' was also incorporated into the NDP and the National Infrastructure Development Plan, which is credited to the direct engagement and awareness-raising activities undertaken by ProEcoServ-SA. In the case of the review of disaster management policy, the ProEcoServ-SA experiences at Eden allowed the team to participate in the review process of the National Disaster Management Act (Act 57 of 2002) in 2012, and to input into the draft Amendment Bill which was published for comment in July 2013.

260. Another important example is ProEcoServ-SA's work with DWA officials and consultants to jointly update the NWRS with the project providing substantial ES inputs including an entire chapter on water resource protection[93] with seven strategic actions adopted directly from the ProEcoServ-SA work on strategic water source areas. The NWRS was finalised in June 2013. Also, ProEcoServ-SA contributed to the development of norms and standards for Biodiversity Management Plans for Ecosystems (BMP-Es), which were published in 2014, ensuring that the categorisation of "ecosystems of special concern" (which now also include FEPAs) included ecosystems that support the provision of ES. The map and concept of strategic water source areas have also been taken up by other local policy processes. For instance, SANParks expressed an interest in incorporating strategic water source areas in their decision-making processes for the management of individual parks, as well as a proposal to expand the national protected area estate to include additional strategically important water resource areas. Finally, the ProEcoServ-SA team has also provided contributions to guide the development of bioregional plans and the review of the NBSAP.

Trinidad and Tobago

261. ProEcoServ-TT has also had some significant successes in embedding project messages, results and approaches into policy, legal and (particularly) planning frameworks, although not as much as expected (or hoped for).

262. The most notable case of successful mainstreaming of ES considerations into the national policy by ProEcoServ-TT is the National Spatial Development Strategy (NSDS), where ecosystems are now included as the first consideration in integrated planning for sustainable development - the NSDS makes explicit calls for ES data, and, importantly, acknowledges the need for spatial tools. According to several stakeholders interviewed during the TE, this inclusion is due in very large part to the involvement of ProEcoServ-TT in the NSDS process.

263. The project's decision-making tools – maps, models and data sets - were of considerable interest to the TCPD (which TCPD has also taken up scenario planning after training by the project), and the Planning Division of the Tobago House of Assembly, but they have yet to be fully integrated as many of the tools were developed late in the project, and there was a change of government (political parties) in September 2015 (illustrating political risk/assumption – see ToC paragraph 74). Certain data sets were still to be transferred at the TE stage, and there was a need for further training in InVEST for staff members.

264. The Trinidad and Tobago final project report sets out how the various policy tools and methodologies developed through the project can feed into policy instruments and processes. The report

[93] Chapter 5 of the NWRS incorporated both the map of strategic water source areas, and a statement of the intent for government departments to cooperate around their protection, and ProEcoServ-SA has been engaged in the process of assisting with inputs into the 5- and 20-year objectives for the regulation and protection of the Strategic Water Source Areas.

presents a very useful schematic, based on IPBES guidance, illustrating the context for policy support tools and methodologies used by ProEcoServ in Trinidad and Tobago. For example, other likely opportunities for active use of ecosystem services information and tools/models collected by the ProEcoServ-TT include the implementation of the Hillside Development Policy and the National Forest Policy. The maps of erosion and sediment generation produced using the InVEST Sediment Retention model and policy and management guidance on restoration to prevent/reduce erosion on steep hillsides should all help strengthen decision-making regarding hillside development by the TCPD. Similarly, the use of the InVEST Sediment Retention and Water Purification models and policy advice on restoration of river-bank vegetation would help to deliver the National Forest Policy and aid planning of forest investments.

Vietnam

265. At the national level in Vietnam, the project has directly contributed to mainstreaming ecosystem services thinking, including the idea of natural capital accounting, into key national legislation such as the Party Resolution no. 24-NQ/TW on responding to Climate Change, National Strategy for Environmental Protection to 2020, vision to 2030, and National Green Growth Strategy. Although all three emphasize the need for increasing investment in ES, restoration of degraded ecosystem and natural capital accounting, Resolution no. 24-NQ/TW in particular stresses the need for assessment of natural resource values and development of natural resource accounting system.

266. At the provincial level, ProEcoServ-VT appears to have successfully mainstreamed ES thinking and project tools (valuation and mappings tools and scenario planning) into land use planning at Ca Mau National Park, which identifies where development options should be restricted in the Park, although it is not clear whether there have been any other successes at local or provincial levels.

Chile

267. There was less success in Chile. Although the ecosystem concept is mentioned in higher-level national policies in Chile, full integration of ES into policy and decision-making processes at the local and regional levels has proved to be a significant challenge. At the municipal level (San Pedro de Atacama) the project co-generated with local stakeholders important information on water balance and tourism statistics that was fed into pilot models for water and tourism management (see paragraph 106). However, these two models (tools) have yet to be formerly adopted either by the municipal authority or the local indigenous community (CPA) and cannot be said to have been integrated (contrary to reports by CEAZA). Also, the TE could not substantiate claims that the ES approach had been mainstreamed into the *Communal Development Plan* and *Municipal Ordinance for Local Environmental Management.* At the regional level, ProEcoServ results were to be fed into two main policy and decision-making processes - the *Regional Development Strategy* and the *Action Plan for Biodiversity in the Antofagasta Region*, but again the status of these is unclear. So this MTO cannot be said to have been achieved yet in Chile.

Medium Term Outcome 2. Improved public and private sector investment to apply ES approaches to support provision of ES and its component BD (includes Outcome 1.2)

268. There is some strong evidence that ProEcoServ inputs and results have already led, or have the potential to lead, to increased budgets and new financial investment to support sustainable provision of ecosystem services. This is most obvious in South Africa, where the NDP, one of the most powerful policy instruments in South Africa, will see Rands 4-trillion (US$93 billion) invested in infrastructure over the next 15 years. This is implemented through the National Infrastructure Plan, a key element of which is a set of 18 Strategic Integrated Projects (SIPs), each of which have a substantial budget allocation. Following ProEcoServ-SA's intervention in partnership with the DEA, a 19th SIP was proposed with a focus on investing in ecological infrastructure for water ecosystem services and water security. Importantly, geographic areas and phases for the implementation of SIP#19 have already been identified, based on the ProEcoServ-SA's input on strategic water source areas. At the TE the proposal for SIP 19 was still awaiting

approval but if it is approved then it will potentially have a very significant positive impact on funding for freshwater BD and ES in South Africa.

269. The modeling work and resulting data layers delivered as part of ProEcoServ-SA have been used to help prioritise investments in various public works programmes, notably the Working for Water, Working on Ecosystems, and Working on Wetlands programmes, including prioritizing funding allocations for these restoration programmes in National Parks in South Africa, with the associated managers and decision makers trained to use these layers as decision tools to help make decisions on their investments. ProEcoServ-SA also provided inputs into the national Disaster Management Amendment Bill, National Disaster Management Centre and National Treasury processes, which interviewees claimed are expected to lead to increased budgets for the adoption of ecosystem-based management approaches to tackling and mitigating extreme risk. Given the successful collaboration between the partners (insurance company, NGOs, municipal authorities and research scientists) over disaster management at Eden, this seems very hopeful.

270. Although the value of these (real and potential) increased investments has not been recorded and tracked, and figures would be hard to compile, according to interviewees it is likely to be substantial and certainly many times greater than the GEF project grant spent on the ProEcoServ-SA activities (catalytic financing)[94], and certainly represents 'good impact for money' in terms of the GEF investment.

Medium Term Outcome 3. Increased relevance of ecosystem services approaches, and the science and economics behind them, in national and international sustainable development processes

271. It is clear that the ProEcoServ has helped to raise the profile and perceived relevance of ecosystem services approaches and closed the divide between science and policy in national development processes, although the evidence is less clear at the international level. This is illustrated through the successful mainstreaming examples (MTO1) and increased budgets (MTO2) outlined above, but it is also manifest by direct requests to the national ProEcoServ teams from government departments for follow-up guidance, and participation in wider processes to develop policies and plans that address environment, development and poverty in the target countries.

272. For instance, in Trinidad and Tobago the fact that ProEcoServ was named as a project of the Government of Trinidad and Tobago in its policy document '*Working for Sustainable Development in Trinidad and Tobago, 2012'* suggests that the ES approach is beginning to be taken seriously by high level policy-makers. Additionally, the National Project Coordinator was invited to sit on the Development Planning Steering Committee for the NSDS.

Lesson 4. A clear lesson from all the countries is that it is necessary to take an opportunistic approach to targeting entry points in decision-making processes. Projects seeking to mainstream ecosystem services into decision-making need to be flexible enough to be able to take advantage of opportunities as they arise (which can be unpredictable), leverage personal connections/relationships in order to catalyze discussions with decision-makers, and identify and secure champions to promote uptake of ecosystem services management messages at the highest levels e.g. through Ministers, Permanent Secretaries, or senior Technical Advisors.

273. However, although ProEcoServ has been relatively successful in engaging policy-makers at high level in the ministries/ public agencies with the largest stake in ProEcoServ's activities and objectives, apart from Vietnam which had a 4-year project partnership with the Ministry of Planning and Investment, no country has had significant engagement with the finance ministries and those most directly concerned with industry, business and development, which probably require a different engagement strategy.

[94] ProEcoServ-SA also undertook a study to highlight potential new sources of investments in ecosystem management.

274. This may have been partly because three of the four executing bodies were essentially academic institutions, which while they had strong connections with government agencies related to environment did not have the connections with the more powerful ministries. Interviews suggested that if UNEP wants to design projects that will mainstream ES services into ministries dealing directly with the economy it has to involve respected economists with the right connections and roles, e.g. dealing with fiscal reform, at the design stage (as the TEEB project did) and the language of proposals should be couched in terms economists use with indicators that economists and development experts would understand built in - this was one of the early lessons from the PEI (another example of poor 'horizontal transfer' of information/results between groups within UNEP Nairobi). In the case of Vietnam, the right groups and individuals were involved to achieve mainstreaming by design. The ProEcoServ-VT team, as staff members of ISPONRE so embedded in central Government in Hanoi, worked as part of a larger team responsible for drafting the Green Growth strategy, and were responsible for ES being included in it, with the Director of ISPONRE also being a member of Green Growth Strategy Board. Interestingly, the South African's approach was to promote the concept of 'ecological infrastructure' to try and influence key non-environment ministries and had some success in that (see paragraph 144), where the word 'infrastructure' had far more traction (and was more comprehensible) than using the term 'ecosystem services' to non-environment sector decision-makers. Overall though, the project probably needed a better understanding of the development and economics arenas if it was going to make a difference with non-environment sectors in all four countries, which was a weakness during the design stage.

275. At the international level (focus of Component 3), there has been some building of partnerships with similar initiatives, notably IPBES, UN Committee of Experts on Environmental-Economic Accounting, TEEB, WAVES, UN Stat, and some other UNEP-GEF initiatives (see paragraph 215). In addition, the ProEcoServ project has been referenced in various international documents of CBD, WAVES, IPBES, TEEB and OECD as well in the 2015 GEF Review report. However, the extent to which these organisations and initiatives have taken up the science results from ProEcoServ (which are limited, and most of the tools and methods developed were not new and original) and how these have fed into policy prescription processes is not clear or well documented. It is not clear whether ProEcoServ's results have actually 'increased the relevance' of ES approaches at the international level (this was not being directly measured by the project), but it should be noted that ES science has already been significant in helping to formulate existing policy prescriptions in global BD and ES-related processes, e.g. with CBD and the creation of the IPBES, so ProEcoServ's impact at the this level was probably minimal. Although it was only possible to interview a few non-UNEP individuals at the international level who had been involved with the ProEcoServ (despite requests, which may indicate a lack of awareness of the ProEcoServ project or is a sign of its relative unimportance at the global level) two global-level interviewees commented that the project is "generally poorly known in the global arena", even though it is promoted by UNEP as one of its 'flagship' projects.

Intermediate states and impact

276. The intermediate state for the ProEcoServ project is '*a reduction of the threats to, and improved protection of, Globally Important Biodiversity and provision of Ecosystem Services'*, which is partly captured in the wording of the project's objective. The final desired long-term impact of the ProEcoServ is '*improved status and resilience of globally significant biodiversity and habitats, and stabilisation, and improvement and sustainable provision of Ecosystem Services for human well-being'*.

277. While the status of, and threats to, globally important biodiversity (GIB) and sustainable provision of ES for human well being have not been measured or documented as part of ProEcoServ, there are some indications that the project may produce some positive outcomes for both biodiversity and ES provision with direct benefits to the well being of human communities, at least at the local level, in the medium to longer term.

278. In terms of GIB, the wetlands of Ca Mau, a Ramsar Site and part of a UNESCO Biosphere Reserve, with one of the largest remaining contiguous mangrove forests in the country, support a very rich biodiversity and a number of ES valuable for local community livelihoods. However, poorly planned land use has strongly impacted on mangrove ecosystem in Ca Mau, with expansion of aquaculture that has resulted in the significant loss of mangrove and associated wetland areas. However, the integration of the ProEcoServ-VT maps showing protected and sustainable use areas into the Land Use Plan for the Ca Mau National Park, should help reduce the threats to and better protect this high biodiversity site and ensure a more sustainable provision of key provisioning and regulating services from the mangrove systems. Apart from their considerable direct financial value, the ProEcoServ-TT work has shown that the mangrove forests significantly reduce coastal vulnerability and improve protection of inland areas from typhoons and storm surge damage so help protect local communities[95]. Separately, the various national-level policies successfully targeted by the project, particularly Party Resolution no. 24-NQ/TW on responding to Climate Change and the National Strategy for Environmental Protection to 2020, vision to 2030 should also lead to biodiversity and ES benefits in the longer term (if funding, capacity and political will continues to be provided - a key assumption in ToC section).

279. In South Africa, the decision by SANParks to clear non-native invasive plants to secure water and manage fire risk in priority areas and new watershed protection investments from the private (insurance) sector to help restore ecosystems and water services should benefit not only the native biodiversity (threatened by invasive plant species, especially Black Wattle *Acacia mearnsii*[96]) at Eden but also local communities, especially small business in the wine and brewery sector through better land and water management, as well as boosting employment (one indicator of human well-being) through job creation opportunities through various public works programmes, such as the Working for Water Programme (see paragraph 390).

280. In Trinidad and Tobago, the incorporation of the mapping and valuation data into the land use planning system, particularly related to forest cover in Trinidad's Northern Range, will hopefully help encourage forest restoration (improving biodiversity value) and reduce damage to communities and livelihoods from floods and lots of topsoil reducing threats to human well-being. And in Chile, if the two DSSs for water and tourism management can be further developed and integrated into local policy and planning structures at SPA, either through the municipal authorities or the CPA, then this is likely to lead to reduced threats to the local biodiversity and ES of the surrounding Salar de Atacama region, as well as reducing conflict between local groups (mining, tourism, agricultural, general population) over water resources. However, to achieve this needs additional effort and support (see paragraph 300 and subsequent paragraphs).

281. In addition, improving the status of the selected bundles of ecosystem services at the pilot sites should help strengthen local communities' resilience to natural hazards (another indicator of human well-being) through enhanced disaster preparedness tools and climate change adaptation prospects, which was a particular focus at some sites, e.g. Eden District pilot in South Africa.

282. The ROtI approach requires ratings to be determined for the outcomes achieved by the project and the progress made towards the 'intermediate states' at the time of the evaluation. The standard UNEP Evaluation Office rating system is presented in Table 5 below and the assessment of the project's progress towards achieving its intended impacts is presented in Annex 7.

Table 3. Rating Scale for Outcomes and Progress towards Intermediate States

Outcome Rating	Rating on progress toward Intermediate States

[95] The erosion protection model developed by ProEcoServ-TT found that in most cases with mangroves existing, wave height and energy were reduced more than 90% when it reached the coastline.

[96] See http://www.iucngisd.org/gisd/species.php?sc=51

D: The project's intended outcomes were not delivered	D: No measures taken to move towards intermediate states.
C: The project's intended outcomes were delivered, but were not designed to feed into a continuing process after project funding	C: The measures designed to move towards intermediate states have started, but have not produced results.
B: The project's intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact.
A: The project's intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding.	A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact.

283. Many of the project's outcomes were at least partially delivered (see above) and some were designed (most not directly) to feed into processes that would lead to impact, e.g. project results mainstreamed into policy processes in all four countries see above). However, not enough thought was given to the identification of responsibilities, and resource needs, in some countries after the GEF funding had finished to achieve MTOs and longer-term impact, and sustainability of project results is a concern (see section 3.4).

284. There is no rating category for partial achievement of project outcomes, so there is no single category rating into which the project fits neatly; it is a mixture of A, B, and C. Therefore, r**ating of progress towards Outcomes has been 'averaged' and is rated "B".**

285. However, as noted in section on the TOC (section2.7.3), there are also a significant number of assumptions and drivers and that may impede or enhance the likelihood of the project's immediate outcomes and intermediate states being reached and the eventual achievement of the project's desired impact.

286. A number of assumptions (can be reworded as the opposite of project risks) need to be met to proceed along the causal pathway. Perhaps chief of these is the assumption, which affects all countries, is that there will be continued political interest/buy-in for mainstreaming of ES approaches into national development policy and planning despite changes in government and key decision makers. This has affected Chile and Trinidad and Tobago during implementation of the ProEcoServ. However, project has attempted to minimize the impact of such threats through a strategy to build the capacity of a core group of low- and mid-level technical staff (who actually engage in technical work on a daily basis) who are more likely to remain in post if there is a change of government, as well as to build capacity in the NGO and local community (especially in Chile) to ensure a second source of capacity can be available should a government change. Also, successful engagement with the private sector, e.g. with insurance sector at Eden in South Africa, which can then champion ecosystem-based management of natural resources (as good business) to governments, is also an important approach to mitigating the risk as governments of most kinds tend to seek to support businesses.

287. In terms of drivers, there has been increasing awareness of the economic values of ES and much recent interest in developing markets for ES globally, including for water provisioning services (supply and quality), and cultural and recreation services, such as ecotourism. Some of the project's partners, notably SANBI in South Africa, have well-developed awareness-raising programmes that look to promote the values of ecosystem services and deployment of ecosystem based management, and UNEP itself is very active in this area particularly at the global level e.g. through individual ecosystem-service focused projects (particularly managed by the ESE Unit in Nairobi) and other initiatives to integrate ecosystem services into the financial sector and its Green Economy programme. Furthermore, the new Sustainable Development Goals (SDGs) contain a number of targets that explicitly mention ecosystem services, or biodiversity-related targets, with, for example, SDG 6 focused on sustainable water management[97] and many of the targets

[97] 6.6 (by 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes).

under SDG 15 such as those related to forests[98]. As mentioned, it would be valuable for UNEP to review the linkage between specific results from ProEcoServ project and the SDGs (see Recommendation 2), which would help support the delivery of the MTOs.

288. In conclusion, progress towards intermediate states has started. It has been helped by the fact that most of the main partners, e.g. CSIR, UWI, CEAZA are all well-established institutions with a history of research into the science of ecosystem services and they will continue to invest in this area. However, although some have strong links/partnerships with the relevant agencies responsible for implementing the policy prescriptions updated through the project, greater uptake and then implementation by non-environment government sectors and particularly by the private sector (whose involvement has been generally weak except for a couple of exceptions) will still need more and targeted attention. **Rating of progress towards the Intermediate States is rated "B-C".**

289. The project has not achieved significant documented changes in environmental status during its lifetime, although there has been some improvement at some sites e.g. Eden (not directly measured but strong opinions reported by interviewees). However, to be fair, the project's focus is not on direct change to environmental status of species or at specific sites but rather targets information, tools, policy, etc. Furthermore, additional factors (external stakeholders, other initiatives, resources, etc) have to be met for the desired environmental impact (improvement in status of Globally Important Biodiversity and ecosystem service provision in the target areas of the field sites and more widely at national level in each country) to be achieved. Consequently, the project merits a final rating of **"BC",** equivalent to **moderately likely.**

The project is considered "Moderately Likely" to achieve impact.

3.3.3 Achievement of the formal project objectives as presented in the Project Document

290. The Project's stated **objective**, given in the ProDoc, was to 'reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making'. There are four indicators with sets of targets to measure achievement of this objective given in the logframe (Annex 5).

291. In the case of the first indicator ('reduced threats to globally important BD through established sustainable use practices and cooperation agreements at various scales in four pilot projects in five countries'), there has been no direct measurement of threats to biodiversity through the ProEcoServ project, so strictly speaking it is not possible to assess achievement. However, the End-of Project targets were designed to match more closely to the second part of the indicator 'sustainable use practices and cooperation agreements (established) at various scales in four pilot projects in five countries', which is more in line with what the project was really intending to address (see section 2.7). Evidence suggests that the project has been partially successful in meeting these indicator targets, although none of the targets for the first indicator have been fully met by any country (South Africa is closest).

292. There is better evidence and compliance with the second (process) indicator target ('At least 1 best practice study per pilot submitted is produced and widely disseminated in the ES community of practice' and 'At least 1 policy/decision support tool for ES per pilot is produced and widely disseminated in the ES community of practice') although 'community of practice' is not defined in project documents (but it seems to be assumed to be anyone who might be interested in the field).

293. Achievement of the target for indictor three – '*National Socio-Economic Development Plans make reference and/or adopt ES tools generated by the project*') appears to be largely achieved, particularly in

[98] 15.2 (by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally) and 15.b (mobilize significantly resources from all sources and at all levels to finance sustainable forest management, and provide adequate incentives to developing countries to advance sustainable forest management, including for conservation and reforestation).

South Africa, but was also good in Vietnam and Trinidad and Tobago (not relevant to Chile as ProEcoServ-CL was focused at the local rather than national level).

294. The final indicator and associated target ('*relevant international agreements and platforms (i.e. CBD, Ramsar, IPBES etc*.) adopt and recognise the importance of new decision making tools and practice examples') is more difficult to gauge as the target does not define how many of these international agreements and platforms would constitute success, and unfortunately only a few personnel from these relevant groups could be interviewed.

295. As stated in the ProDoc, the overall **goal** of the project is 'to better integrate ecosystem assessment, scenario development and economic valuation of ecosystem services into national sustainable development planning'. As reported in the previous sections, the project has had considerable success in these areas, although, as mentioned above, the success of mainstreaming for each of these three elements has varied between countries (for instance, South Africa focused on promoting the concept of ecological infrastructure rather than economic valuation of ecosystem services, see paragraph 127) and there were also issues of sustainability of project results (see below).

The overall rating for the achievement of project goals and objectives (as stated) is Moderately Satisfactory.

3.4 Sustainability

296. For GEF projects sustainability is understood as the probability of project-derived results and impacts continuing over the longer term after project funding and assistance has ended. The TE examined sustainability of the project from the point of view of four parameters: socio-political, financial, institutional and environmental.

297. At the design stage, the project did not present a clear strategy or set of actions to secure the sustainability of project results (not unusual in GEF projects). According to the ProDoc, the project's proposed approach, strategy and planned interventions themselves incorporated factors to support the sustainability of its outputs, outcomes and impacts once the project had concluded. Essentially, the project's overall approach to sustainability relied on the delivery of policy-relevant information, tools, models and systems (Component 1), and their integration into national sectoral policy and planning frameworks (Component 2), together with strengthening of existing national capacities and awareness to help deliver and maintain Components 1 and 2. At the global level (Component 3), the project has sought to strengthen the science-policy interface for ES policy making, feed outputs and lessons learned from the national pilots and experiences into international initiatives and promote results to key global stakeholders, which once adopted can be considered 'sustainable' results.

298. Unfortunately, sustainability was not adequately considered in the last 18 months of the project and neither the overall project nor most of the individual countries (South Africa appears to be an exception) developed a separate sustainability and 'exit' strategy during the last year of the project, as is common for GEF projects, and there was only a relatively brief discussion at the PSC final meeting in Vietnam in 2014. Instead efforts were focused on finishing activities (especially in Trinidad and Tobago which was behind on delivery) and on dissemination of the results. A draft sustainability plan' (Project for Ecosystem Services: Lessons Learned and Follow Up Plans) was been produced by the last Project Manager (no longer with UNEP but no replacement as project is operationally closed) but this is somewhat wide ranging (not limited to project) and has not been widely shared (nor agreed) with the project partners, and focuses largely on new follow up proposals not the sustainability of the project results themselves. So overall, there has been no clear view or written plan on priority activities for achieving sustainability, indicating who would be responsible for their implementation and follow-up, the timing or resources needed.

Recommendation 3. *It is recommended that UNEP-GEF projects begin discussions of sustainability of project results and develop an exit strategy some 12-18 months before the operational end of a project and with a new partnership strategy, not leave these to the last few months (or after the project has been closed operationally!). Agreement and responsibility for this should be built into the PCAs with executing agencies and reported on at the PSC meeting closest to last the 12 months before closure of a GEF project. It is also suggested that the design and implementation of activities to facilitate sustainability should be part of the project design template, and an area to be especially considered by UNEP's Project Review Committee. Written guidance on addressing sustainability should be developed by the UNEP GEF unit for distribution to project teams.* ***Responsibility****: UNEP GEF Unit and UNEP divisional staff involved with GEF projects in Nairobi, EMSP and CCSP Coordinators, UNEP PRC, and future executing partners for UNEP GEF projects.* ***Timeframe****: Future GEF projects.*

3.4.1 Socio-political sustainability

299. There are significant doubts about aspects of socio-political sustainability of some of the project's results, and at the TE point the level of ownership among key stakeholders and targeted users of the project's tools and other results was mixed.

300. The likelihood of sustainability is considered lowest in Chile, where there was no formal agreement on the handover of the two DSS tools (tourism and water) at the end of the project, and over a year since the final project workshop held on 19th March 2015, the tools are not being used locally and capacity (individuals trained in their use) and knowledge/awareness of their utility is gradually eroding away.

301. Despite two workshops at local and regional level (SPA and Antofagasta) in 2014/2015 aimed at agreeing the institutional and organizational conditions to update and maintain the DSS tools, no decision was reached. It was envisaged one or more institutions concerned with environment and/or tourism, namely Corporación Nacional Forestal (National Forest Corporation, CONAF), SERNATUR, Seremi Medio Ambiente (SEREMI MA, the regional office of the MoE in Antofagasta) and DGA at the regional level and the municipality authorities and local indigenous council (Consejo de Pueblos Atacameños, CPA) at the local level would take responsibility, but unfortunately, none were willing. In the case of the regional government institutions (in Antofagasta) it appears they were reluctant because they felt low ownership of the results[99], but among the local institutions around SPA, the decision was based on a perceived lack of sufficient capacity and resources. There was also some skepticism from SERNATUR (tourism authority) about the tourism model, and the Ministry of Environment (MoE) in Santiago had little interest in, or real knowledge or uptake of, the project, as they relied on the regional office in Antofagasta for information and guidance.

302. There has also been a legal question over which agencies/groups have the legal authority (or responsibility) to adopt the DSS tools and necessary databases at SPA and implement any management recommendations derived from the use of the tools, given that DGA advises on water management (although most of the water concessions are in private ownership in the area), and the management of tourism is complicated and spread across several bodies in the region of SPA. These issues need to be clarified, and there would need to be some form of legal agreement drawn up between relevant parties.

303. At the TE, the DSS had not been adopted by any group within the SPA region, and the models and databases are still held within CEAZA's offices at La Serena and on the laptop of the Project Manager at SPA (but not with the local authorities).

304. Another important factor relating to the future use of the tools is the fact that there are still no established monitoring networks to collect real time data on tourism and water features (hydro-meteorological stations, groundwater measurements and monitoring of visitors in real-time) to feed into

[99] Judging from interviews the reason for DGA's lack of interest seemed to relate more to the fact that the project funding for the water model did not go through DGA than any technical reasons to reject it.

the DSS tools. As mentioned previously (see paragraph 106 onwards), there are little reliable up-to-date water data available for the Salar de Atacama and tourism data for the area is patchy and not collated.

305. However, the TE found a willingness to try and find a solution among local players and based on interviews, the most practical solution would be if the two models/DSS were managed by the CPA in partnership with the Fundacion de Cultura y Tourismo with a special oversight committee, comprising the Mayor's office (chair of committee), CONAF, SPA office of SERNATUR, and the regional office of MoE and DGA in Antofagasta, playing an oversight role.

306. The CPA was previously interested in taking on the role of managing the two DSS but has had very limited capacity until recently. Due in part to the influence of the ProEcoServ project the CPA has established itself as a company and is employing a number of professional staff, including a geographer who, with some additional training, could take charge of the operation and maintenance of the DSS/tools. Moreover, the CPA has recently signed a deal with a Lithium mining company (Rockwood) operating in the Salar in which the mining company will establish bore holes and build meteorological stations throughout the basin on Atacameño land, the data from which will be made available to the CPA so could feed into the ProEcoServ water balance model/DSS tool. It is therefore recommended that the ProEcoServ-CL team investigate the opportunity for securing agreement on the adoption of the two models by the CPA (water, possibly tourism) and Fundacion (tourism). Funding will be needed for this, but some of the funds under the agreement between the CPA and Rockwood can be used for capacity building, so there is a good opportunity for co-financing.

307. A series of steps to move the process forward and ensure better sustainability of ProEcoSErv results were discussed with stakeholders at SPA: (i) identify DSS requirements (particularly in terms of information[100] and current capacity and equipment needs to be able to deploy the tools); (ii) legal review of responsibilities for ownership of the tools and implementation of any recommendations; (iii) institutional arrangements for DSS implementation; (iv) additional training (CEAZA staff from La Serena will to provide this) of those who are to utilize the DDS and updating of the decision-makers on the tools and their use (there have been some changes in positions in the last year); (v) agree and establish real time monitoring systems on tourism activities and water data; and (vi) full piloting of the implementation of the tools. This should be treated as a priority for the remaining GEF funding (see paragraph 405), as without further investment there will be no sustainability or long-term impact of the project tools at SPA.

308. An outline proposal to establish the required data collection/monitoring systems (for tourists minimum data on distribution and relative levels of tourists) that has been recently developed by the former Project Manager at SPA which could be used as the basis for discussion.

Recommendation 4. *It is recommended that a proposal is developed to transfer ownership of the two DSS tools to local stakeholders (with clear identification of the steps in the process – what, how, who, when, where, with what resources, etc) and sufficient local capacity built to ensure their operation for at least 18 months (until they are fully integrated into local systems and sustainable funding can be found). The proposal should consider the recent draft proposal for the establishment of data collection/monitoring systems for tourism and water. It is recommended that the process is led by the CPA and hosted by the office of the Mayor of SPA. Additional input from CEAZA to help develop sufficient local capacity building to enable the community to use the tools will be required. This recommendation should be treated as a priority for funding using any remaining funds from the GEF grant, e.g. for meetings, development of the proposal, and training in the use of the tools to members of the community who are not proficient.* ***Responsibility****: CEAZA (La Serena), Project Manager SPA, Mayor's office and municipal authority, CPA, Fundacion de*

[100] For the tourism model, there is still a need to establish a database for monitoring number visitors to tourist sites in order to understand how they are impacting on the ES, and for the water model, there is a need for data about the level of underground water in the basin, although this might be resolved as the Atacameños Indigenous Council has already begun to develop a project for monitoring aquifers jointly with one of the Lithium mining companies.

Cultura y Tourismo local office of SERNATUR, private sector travel groups, CONAF, and regional DGA and MoE offices in Antofagasta, and UNEP (Nairobi). ***Timeframe****: Before end of April 2017.*

309. In relation to the tourism issue, SERNATUR is interested in hiring consultant to help them develop sustainable tourism guidelines for the area, which could present an opportunity for capturing statistics on tourism (where there is an increasing realization that you cannot manage what you cannot measure) and also another source of co-financing for the above recommendation.

310. In South Africa, sustainability was considered more carefully early on in implementation, part of which has involved CSIR developing and strengthening its partnership with several key environmental and development related agencies that are expected to carry forward the legacy of the ProEcoServ, including DEA, DWA and especially SANBI, who have all been involved in co-management or co-production of project activities. Socio-political sustainability has also been supported by the establishment of several groups and learning networks as a result of the project at national, provincial and municipal levels of governance in South Africa (see paragraph 240). These are all hosted by appropriately mandated government agencies, which is encouraging for post-project sustainability. Also, importantly, the insurance sector, has taken up the idea of adding ecosystem management to reduce risk and is spreading the model developed at Eden among the industry throughout South Africa, which indicates impact and sustainability.

311. In Trinidad and Tobago, there has been a high level of ownership on several major elements of the project, especially in relation to the NSDS. Judging from TE interviews, the TCPD is clearly committed to pursuing the use of decision support tools, such as InVest and SEAs, particularly for the implementation of the NSDS, but also for the Hillside Development Policy. There was also a good level of ownership of the proposed PES scheme in the Caura Valley, judging by the continued level of interest from the Caura Valley Village Council, and the Green Fund also expressed a continued strong interest in exploring the options for introducing PES-type schemes in Trinidad and Tobago, and there is therefore potential for this aspect of ProEcoServ to continue in the future, even though it has not been possible to develop the PES project in the ProEcoServ-TT's timeframe. However, this will need additional resources (see Recommendation 1).

312. However, there was poor reception from the Ministry of Finance. Recent change of Government (September 2015) has meant that new alliances will need to be built. Unfortunately, at the TE point, new government's policy towards the environment and approach to sustainable development was still unclear and had recently introduced an 'austerity' programme due to falling revenue from oil and gas but it appears 'less environment focused' so longer-term impact and sustainability uncertain. However, the project's strategy to build interest and capacity among middle ranking technical staff in government agencies e.g. TCPD, should mean that the new administration should hear a clear message to continue to consider ES in future policy from its own staff.

313. In Vietnam, Government commitment to ES and interest in natural capital at the national level is clearly high but the MTE reported a low level of understanding of the tools at the provincial level. Unfortunately, the TE was not able to determine whether this had improved (corrective measures were suggested by the MTE), although the incorporation of the mapping and valuation results at Ca Mau into the Land Use Plan for the national park means that sustainability of project results at the local level has been achieved.

The rating for socio-political sustainability is Moderately Likely

3.4.2 Sustainability of Financial Resources

314. Financial sustainability was not detailed at the design stage, but the project's strategy for financial sustainability has rested on the expectation that eventually the costs of adopting an ES approach would be offset through payments for those services (e.g. PES), and through reduced costs incurred in addressing threats to important regulatory ES such as water purification, natural hazard mitigation or disease

regulation. However, this assumes that payment systems can be successfully established, and that the expected savings can be convincingly demonstrated. The argument has been won in some cases, e.g. at Eden in South Africa which now has the private insurance sector funding sustainable land management practices to reduce costs of natural disaster-related claims, which makes good business sense.

315. In Trinidad and Tobago, the most promising route for financial sustainability was expected to be from the Green Fund, which has expressed a special interest in the PES approach (see paragraph 154). Indeed, it could also be argued that the Government of Trinidad and Tobago should naturally be seen as a 'buyer' of the ecosystem services provided by the forests of the Caura Valley in the Northern Range and elsewhere as the ES functions they provide – soil retention and erosion prevention, provision of freshwater, flood protection, pollination, etc - are essential for the physical and economic well-being of the population at lower elevations. In addition, all of the citizens of Trinidad and Tobago fund the Green Fund through tax contributions (although it is largely businesses that provide the revenue for the Green Fund, people work for those businesses and make them successful).

316. Several proposals for funding follow-up projects have been developed by the country teams but they have had mixed success. In Chile, a proposal was submitted to Antofagasta's regional Fund for Innovation and Competitiveness (FIC-R) that aimed to strength the capacity of regional decision- and policy-makers to analyze decisions on key ES. However, the proposal was rejected on two occasions (apparently due to 'political reasons').

317. Follow-up funding from WAVES was also suggested to support ProEcoServ green national accounting opportunities, but while the UNEP ESE Unit has strong links with WAVES no specific proposals have been delivered, although Vietnam is currently developing a 'roadmap' for membership of WAVES (see paragraph 205).

The rating for the financial sustainability is Moderately Likely

3.4.3 Sustainability of Institutional Frameworks

318. Whilst the key partner institutions (CEAZA, CSIR, UWI and ISPONRE) are well–established and funded and so relatively stable institutionally, some of the government and NGO partners suffer from capacity issues and the risk of political change. For instance, whilst the CSO in Trinidad and Tobago is interested in taking the lead on Green Accounting for the country it currently lacks sufficient capacity which may be further reduced (see paragraph 172). In Chile, there has been continuing low local capacity among both municipal government and local community groups available at SPA (illustrated by the fact that four foreigners[101] were part of the CEAZA technical team due to lack of expertise in Chile). This continues to be the case and of all the ProEcoServ countries, the issue of institutional sustainability is probably of most concern in Chile.

319. Some of the networks created through the project should help support sustainability of project results through strengthening institutional sustainability. For instance, in Vietnam, ProEcoServ-VT worked closely with different initiatives working on natural capital (i.e. World Bank, Asian Development Bank, The Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), WWF) which have been maintained and indeed a proposal to create a group that involves many of the key partners and builds on the ProEcoServ work has been developed by ISPONRE (see paragraph 205). This is likely to be endorsed by government and thus provide some level of institutional sustainability for the project results. The strong supportive networks in South Africa developed through the project have already been mentioned (see paragraph 240).

[101] An InVEST model specialist, two hydrologists and a biologist based at CEAZA in La Serena.

320. One factor that has negatively impacted the likelihood of institutional sustainability in Chile and Trinidad and Tobago has been changes in Government at both national and sub-national levels. In Trinidad and Tobago, the Government changed following the September 2015 national general election, and all of the high-level policy makers with whom ProEcoServ-TT had built a strong relationship over the previous 3-4 years no longer held office. This illustrates a political risk. In Chile, national elections that took place at the end of 2013 similarly led to changes in national and regional (Antofagasta) government administrations with resultant changes in membership of the project steering committee, and it was necessary to restart engagements, repeat awareness raising and key processes when the new administration took office in March 2014, which presented a huge burden for the ProEcoServ-CL team.

The rating for the institutional sustainability is Moderately Likely.

3.4.4 Environmental sustainability

321. The ProDoc does not identify any specific environmental factors that could affect sustainability of project results, but there is a brief 'Environmental and Social Safeguards' section that covers some of the issues. This argues that the focus on developing and testing tools and methodologies that will facilitate the valuation and integration of ES into sectoral and development policy and planning processes will lead to environmental (and social) benefits, and 'increase the appreciation of BD by multiple stakeholders'. Certainly, the adoption of the approaches and various decision support tools in South Africa should lead to improved resilience of the target ecosystems at those sites, and the same can be said for ProEcoServ's work in Trinidad and Tobago and Vietnam. However, there will not be any move towards environmental sustainability at SPA in Chile unless the two DSS tools and associated data collection schemes are adopted and capacity and resources provided to ensure their operation locally.

322. Climate change impacts were not considered an important element in the design of this project, apart from in South Africa[102]. However, by promoting the maintenance and restoration of ES (and associated BD) in the four target countries in the target area, and particularly through the focus on reducing land degradation in South Africa (Eden and transboundary use cases), and activities examining carbon sequestration work in forests in Trinidad and Tobago and mangroves in Vietnam, the project contributes to the mitigation of Green House Gases (GHG) and the threat from climate change impacts.

The rating for the environmental sustainability element is Moderately Likely.

The overall rating for Sustainability is Moderately Likely.

3.4.5 Catalytic Role and Replication

Catalysis

323. ProEcoServ did not have a central replication strategy and opportunities for catalysis[103] and replication[104] were largely identified and followed by the national teams with little direction from the UNEP

[102] Although recent data from Chile suggest that freshwater supplies may be heavily compromised by climate change in the Salar de Atacama region if climate predictions are correct about snow fall on the higher Andes, the source of the groundwater for SPA, Eric Sproles pers. comm.

[103] Catalysis can be said to occur in cases where project activities have stimulated others to undertake complementary activities in line with the project's aims and results. This includes behavioural, institutional or policy changes, incentives, catalytic financing, or champions to catalyse change.

[104] Replication is usually defined as lessons, experiences, demonstrations, techniques, or approaches coming out of a project that are repeated or scaled up in the design and implementation of other projects.

ESE Unit (this only came in the last year). Despite this, there are been some very good examples of catalysis of project ideas and results to date, including significant catalytic financing. Catalysis has been helped by the fact that the project was built on a long history of established initiatives and work on ES/EM in most countries involving institutions that were already committed to mainstreaming ES approaches.

324. In Chile, the ProEcoServ-CL team secured funding for two projects for 2015 for work with local communities in the *Comuna* – the first a project called '*Ckapin isaya Ckonicks: Sol para nuestros Ancianos*' (funded by the Environmental Protection Fund sponsored by the Ministry of the Environment) which will work on renewable energy in the SPA region, and the second project '*Valorización de la Quínoa Atacameña a través de la caracterización nutracéutica, elaboración de productos funcionalesy cadenas de comercialización*' (funded through the Agricultural Innovation Fund and sponsored by the Comisión Nacional de Investigación Científica y Tecnológica) which is focused on promoting the development and marketing of local varieties of quinoa and directed at low-income smallholders, thereby bolster cultural ESs related to traditional crops and techniques as well as enhancing local livelihoods. In addition, the Council of Atacameños People (CPA) has been included in a high-level Presidential consulting body, which delivered a major policy white paper on the future of lithium mining in Chile, which is centered on SPA. This document explicitly includes the ecosystem concept, water provisioning, ecotourism and the need for sustainable development to preserve the fragile ESs that are key to local communities. The direct involvement of the Atacameño community in the ProEcoServ-CL (particularly through the Project Manager and Chairman of the CPA) helped to raise the profile of ES in the policy document.

325. In addition, the project activities at SPA have reinvigorated a previous proposal for the collection of tourist flow statistics in the Municipality of SPA which is currently being evaluated by INE, with the key objective of capturing data and tourist flows from tour operators and hotel companies (see paragraph 110).

326. In Trinidad and Tobago, examples of catalysis include ES valuation study of Caroni Swamp[105], which secured funding of 950,000 TT$, which was aided and promoted by the project team, catalyzed a body of work on other ES research and mainstreaming at UWI, and the Green Fund remains extremely supportive of the PES model due to continued input from the ProEcoServ-TT team e.g. through invitations to training workshops on PES.

327. In South Africa, there has been particularly strong and multiple examples of catalysis of other initiatives through the project including catalytic financing, which are covered in depth in ProEcoServ-SA's final report (also summarised in the overall project Synthesis Report). Amongst the many examples are: a restoration project to clear invasive non-native trees driving drought risk on hops farms in the Eden District, which will see c. US$4 million of investment in the area by the beverage sector, farmers, and government funding for poverty alleviation, creating many jobs in the process; a similar multi-million dollar investment by SANParks to clear non-native trees linked to wildfire risk in and around the Garden Route National Park; and a successful WWF-developed civil society campaign called 'The Journey of Water' (www.journeyofwater.co.za) following on from ProEcoServ-SA's work on identification and quantification of the country's strategic water source areas. Also, perhaps most importantly, inputs from the Olifants Catchment into National Water Resources Strategy catalysed the proposal for a 19th Strategic Integrated Project (SIP) on Ecological Infrastructure (with a focus on freshwater ecosystems for water security) which, it is hoped, will direct investments for the National Development Plan. However, perhaps potentially the most significant (in terms of its reach into other sectors) example of catalysis has been the support given to the 'Business-Adopt-A-Municipality' (BAAM) forum set up by the insurance sector for businesses to support local authorities in managing disaster risk and infrastructure. The BAAM was piloted in the Eden District (as part of ProEcoServ-SA) and is beginning to be rolled out to other high-risk municipalities across South Africa. The insurance company involved at Eden was particularly hopeful about its success because it has attracted interest from competitors in the insurance sector.

[105] http://caroniswamprdi.org/

328. Finally, in Vietnam, the project team has helped to catalyse development of a 'natural capital roadmap' for the country which is key document in the preparation stage to support Vietnam to become a Core Implementing Country (CIC) of the WB-managed WAVES global partnership, and has worked with the Asian Development Bank (ADB) under the Core Environment Program to accelerate activities on natural capital in Vietnam and in the Greater Mekong Subregion (GMS), as reported previously, that ProEcoServ-VT has become highly catalytic (a leader) in promoting the natural capital agenda among countries in the region. The ProEcoServ-VT team has also partnered with GIZ on a project titled 'strategic mainstreaming of Ecosystem Based Adaptation (EbA) which runs from 2014 – 2018, and results of ProEcoServ have influenced the thinking, direction and some of the activities in the EbA project[106].

329. The project has also been surprising successful at creating 'champions' to catalyse change, who have actively promoted the project within and outside their institutions, facilitated meetings and linkage with other relevant initiatives, with examples in all countries. They appear to have been most effective where they already had a strong relationship with members of the national teams, such as with the National Project Coordinator in Trinidad and Tobago.

Replication

330. The project has not put much emphasis into exploring replication opportunities for project results and as a result there are relatively few examples of direct replication. However, there are certainly opportunities.

331. In the case of Chile for instance, the framework used to develop the water management model and DSS (and to lesser extent for the tourism model), which was targeted at the local community/municipal level and sought to resolve conflict over water issues, has high potential for direct replication elsewhere in the country, especially because there have been tensions between indigenous people and central and regional government over access and use of natural resources, e.g. on Easter Island. ProEcoServ used a participatory process that sought to empower indigenous people with concepts, knowledge and tools on ES that traditionally have been managed by national authorities. This was well appreciated by the CPA and is considered innovative for Chile. However, the TE found little awareness of the project at the national level with a weak link between results and recommendations derived from the local level and the national policy level, so if this replication of project findings at SPA is to be achieved then (i) the DSS tools as SPA need to be taken up by and integrated into local stakeholder decision-making processes (see above), and (ii) better engagement of the regional authorities in Antofagasta to ensure they are brought to the attention at the national level.

332. In South Africa, among other things, a new study on the importance of ecological infrastructure in urban contexts for the City of Cape Town is being undertaken, based on the same co-development of data layers and approaches pioneered in the Eden District. There were also cases of replication in Trinidad and Tobago, where the Tobago House of Assembly (THA), which has participated in most of the project's training and outreach activities, has independent funding and intends to develop (replicate) some project activities on Tobago (a sort of 'ProEcoServ 2' model), particularly biophysical mapping and NCA, and to develop tourism satellite accounting and especially PES projects for the island, which it seems as in line with Tobago's Comprehensive Economic development Plan (2013-2017) whose vision is a 'clean, green, serene Tobago'.

333. There is also evidence of successful replication of project approaches in Vietnam, where mapping tools developed under ProEcoServ at Ca Mau were replicated in a study undertaken by the World Wide Fund for Nature (WWF) in Ben Tre Province (another region of the Mekong Delta region of Viet Nam) as

[106] One reviewer commented that '*ISPONRE is now working with different development partners and key line Ministries to develop the Natural Capital Platform (NCP) to facilitate the coordination and exchange of knowledge on natural capital among initiatives and enhance the awareness/capacity of policy makers for mainstreaming of ES in to development planning processes.'*

part of the development of technical guidelines for mainstreaming ecosystem-based adaptation into planning process. It is also expected that the pilot study in Ca Mau will serve as a demonstration model of how to translate approved national strategy and policies into action. There are 64 provinces in Viet Nam, with decision-making authority, so there is plenty of opportunity for replication[107].

334. At the global level, there is no direct evidence yet that any of the approaches or tools developed through ProEcoServ have been copied and applied to other countries. Most of the linkage at global level (through Component 3) has been about providing information (publications, briefings, etc). However, there was some (limited) direct evidence of catalysis or replication at the global level, although most of the approaches and tools (GIS mapping, economic valuation, etc) are well tested so this is not surprising. The project is considered a precursor of a specific programme in GEF6 ('Integration of Biodiversity and Ecosystem Services in to Development Finance and Planning')[108], and is referenced in a May 2015 report by the GEF.

The project's catalytic role and replication is rated as Highly Satisfactory.

3.5 Efficiency

3.5.1 Cost efficiencies

335. The project built on, and was to be executed by, a collaboration between several key partners (CEAZA in Chile, CSIR in South Africa, UWI in Trinidad and Tobago, and ISPONRE in Vietnam) all of which have well-established networks and programmes associated with the project's aims (including previous SGA work on which the project was built), had prior experience of successful engagement with public policy decision-making processes, and most had a history of working with the local communities in the pilot areas (so good local knowledge and relationships, as well as baseline data), and particularly in the case of South Africa, the project's implementation approach was based on existing data and previous projects (rather than needing to collect new data). These were seen as providing an opportunity to maximize impacts within both government and civil society and offer efficient opportunities to mainstream the project results more widely through partner organisations. However, the focus on, and heavy involvement of, research/academic institutions as the executing bodies in three of the four countries (ISOPONRE in Vietnam is more tied directly into government) has been considered a weakness, due to the relatively poor linkage with key non-environment sector ministries that ProEcoServ sought to target, particularly ministries of finance.

336. The adoption of the InVEST tool[109] for some project activities, which is a well-tested, widely used, and open-access platform, was another example of the project's approach to promoting efficiency, although there was some initial dissention among the PSC members over the usefulness of the InVEST tool (alternatives were suggested but rejected early on).

[107] One reviewer commented that '*The NCP is coming soon and will be a form of transferring and replicating the experiences of the project for wider application'.*

[108] One reviewer noted that the GEF Secretariat in their report (GEF/C.48/03; May 08, 2015)), states that 'The Project for Ecosystem Services Project for Ecosystem Services (UNEP, GEF ID #3807) with pilots in four countries: Chile, South Africa, Trinidad & Tobago and Vietnam underwent its mid-term evaluation in 2013 (GEF $6.3 millions; Co-Financing $24 millions). The project focuses on providing access to scientific information, and developing tools and products to be used in land- and resource use-planning. It builds on the Millennium Ecosystem Assessment (MA), its sub-global assessments (SGA) and the ongoing MA-follow-up process. The project aims at going beyond the science of the MA, developing evidence on how ecosystem services impact welfare and economies, and using this to influence key sector planning frameworks and macro-economic planning models. As such, the project was a precursor of Program 10 in the GEF-6 biodiversity strategy, "Integration of Biodiversity and Ecosystem Services in to Development Finance and Planning". The early results thus far provide evidence that, across a variety of national circumstances, that the objective of Program 10 is achievable'.

[109] http://www.naturalcapitalproject.org/invest/

337. The Implementing Agency (UNEP-DEPI) also has long-established working relationships with many international fora/institutions/initiatives operating in the ES arena e.g. as MEA COPs, IPBES[110], PEI, WAVES, GLOBE and UN-REDD, with which the project could both learn from and inform as the results of ProEcoServ began to be delivered. In addition, the Executing Agency (DEPI's ESE Unit) has globally recognized experience in the area of ecosystem services valuation, assessment and mainstreaming, and natural capital accounting, and again good linkage with relevant international processes e.g. TEEB

338. All of the above were seen as a means to help keep start-up and implementation costs low, and presented additional opportunities to raise awareness and promote the mainstreaming of the project results more widely.

339. The close physical proximity between the Implementing Agency (GEF Unit, DEPI) and Executing Agency (ESE Unit) and financial management of the project – all in the same building at UNEP's headquarters - improved efficiency of communication of administration on the project.

3.5.2 Timeliness

340. There was a very significant start-up/preparatory period, including a lengthy period to develop contracts (PCAs) with national partners and it took roughly 6 months to recruit the Global Project Manager. Although the project attempted to catch up and the number of activities were revised and reduced across countries following the (delayed) MTE, two NCEs were required to complete the project - a request for a 12-month extension in 2014, with an additional one in 2015 (see paragraph 64). So the project that was originally expected to be completed by June 2014, did not finish until in December 2015, some 18 months later than originally anticipated. This is considered a significant delay, even for a GEF project. Reasons for the delays are given in section 3.6.

341. The use of PhD students to lead the data collection at the three pilot sites in Trinidad and Tobago had mixed results with two of the three unable to deliver their full results before the close of the project which brings into question the efficiency of this approach to solving capacity issues for 4-year GEF projects.

The overall rating for efficiency is Moderately Satisfactory (reduced by poor timeliness).

3.6 Factors affecting performance

3.6.1 Preparation and readiness

Project design

342. The project design presented in the ProDoc is somewhat muddled and repetitive in places, with text on background, rationale, threats, and institutional analysis, for instance, repeating and/or overlapping in a number of sections, the causal linkage between project activities and outputs and the intermediate states and final impact is not well articulated (see section 2.7.2), and country specific information is scattered throughout the ProDoc making it difficult to understand what was to happen in each country. Many interviewees commented that it took them many months and much discussion with the PMU in Nairobi to understand what they were expected to achieve, and indeed, it was only after the review, revision and pruning of activities following the MTE that some interviewees felt they understood the project.

[110] CSIR and Cropper Foundation (originally jointly managing the project in Trinidad and Tobago) have also been involved in IPBES strengthening the links to ProEcoServ at the country level

343. It was also quickly recognised that some of the countries had too many activity sets given their capacity and time constraints, and with some inappropriate activities[111]. The national teams spent a significant amount of time was trying to deliver on these (described by some interviewees as a 'tick box method') that often distracted from the actions that were necessary for the project to be more successful on the ground (outcome). This led to slow delivery that couldn't be addressed until the MTE. The fact that two extensions were needed to deliver the project is evidence that the original timeframe was rather too ambitious. In part the slow delivery is due to the nature of mainstreaming which generally needs to be treated as a long-term venture, and a degree of flexibility to be able to respond to new opportunities for integrating project messages and results as they arise. However, the long delays and difficulties faced in delivering this projects are typical of large complex UNEP-GEF projects, which suggests they should be treated in a different way from smaller projects within UNEP, and UNEP and GEF need to consider building in proper timeframes when designing projects to fit with the 4-year GEF cycle (suggested 5-8 years for mainstreaming, possibly as a two-stage project with funds for second (mainstreaming) stage triggered by success of first).

Lesson 5. Multi-country mainstreaming projects should be designed over a longer period than 4 years as lead in times for establishing project management systems (inception periods), collecting necessary data on value of ecosystem services (building the economic argument for ecosystem services) and establishing relationships with key decision makers can be lengthy.

344. Considerable time could have been saved, and a much more efficient project design delivered, if there had been the opportunity to review and revise the project's logframe and feasibility of delivering key results (and associated workplans), at the inception stage to produce a more targeted, tailored project. Unfortunately, the project felt it was 'locked in' to the original design and set of activities until the MTE, which due to delays at beginning of the project meant it had to be rescheduled to 17 months, even though many countries were engaging in activities which were not relevant or appropriate to the country.

345. Consequently, UNEP might like to consider designing GEF projects to level of outcome and identifying outline outputs at the design stage, but leave detailed planning on activities to the inception stage, when a project management team would undertake a thorough review of the project's activities, budgets, implementation arrangements, etc.

Recommendation 5. *It is recommended that large, complex, multi-country UNEP-GEF projects are designed with just a few key deliverables and activities that would have high impact (and be achievable) rather than trying to deliver a large numbers of activities. In addition, project design teams should be encouraged to detail to the outcome level (no more than 3-4 outcomes) with outputs and activities treated as more indicative at the PPG stage and then reviewed and developed at the inception stage (within the constraints of the GEF budget and rules and dependent upon approval by the Project Steering Committee (PSC) so that the project starts implementation with a set of relevant, realistic activities that will better deliver on the intended higher-level project results. To reflect this, indicators and targets should be only presented for the objective and outcome levels in the logframe, and not at output level (these are achieved or not so can be monitored simply). This would improve flexibility of the GEF approach and allow for the constraints of the short PPG phase, and mean projects were not 'locked in' to carrying out costly time-consuming activities of limited relevance until the MTE. In addition, given the need for flexibility, especially for mainstreaming projects, UNEP should consider including an unallocated 'contingency' line (suggested 10-15%) in the original project budget that allows for change at the MTE stage if required.* ***Responsibility****: UNEP-GEF Task Managers, UNEP GEF Unit, UNEP Project Review Committee.* ***Timeframe****: future UNEP GEF projects.*

[111] For instance, when ProEcoServ activities began in Trinidad and Tobago in 2011 there were over 60 activities with associated deliverables in the initial workplan. An analysis of the alignment of these activities with the project's objectives showed that there were a number of activities (8 sets) that had little bearing on ProEcoServ's goals in Trinidad and Tobago.

346. GEF mainstreaming projects, in particular, need more strategic thinking at the design stage on how to most effectively mainstream results into policy and the decision-making processes and to only include activities that address these, to avoid including unnecessary activities being added to project designs. Projects need to identify early on what the key areas are that are likely to make progress (reviewed at the inception stage and changes made if needed).

347. Although the project preparation (PPG phase) was generally well organized, there was insufficient time to design a coherent project of such complexity with multiple sets of activities in four countries and a global component, given the small GEF (PPG) funds available (US$67,000 from GEF), which was very low for such a large complex project - the GEF budget of US$ 6, 296, 637 and co-financing of over US$20 million so the PPG funding represented just over 1% of the total GEF funding.

348. A key issue impacting this project has been the capacity and readiness of partners and stakeholders to deliver or effectively engaged with the project activities which have varied enormously between countries, with Vietnam being particularly low at the start, and some countries have struggle to deliver, notably Trinidad and Tobago. There was no proper assessment of capacity at the design stage (sufficient capacity was simply assumed). This needs to be properly considered in future UNEP-GEF projects, especially for regional and global projects, as UNEP does not support a national office network, so lacks the ability to offer the local support which other IAs, e.g. UNDP, FAO and WB, which do have country offices, can provide.

Recommendation 6. *It is recommended that UNEP undertake a formal assessment of the capacity of executing partners during the project design (PPG) stage. This should be reviewed as mandatory and included as part of the internal UNEP PRC review, in order to ensure that there is sufficient capacity to carry out the project (not just assume executing bodies have it), especially for large multi-country projects. A formal capacity assessment sheet should be designed (modified according to the project needs) and built into the PPG process (attached as an annex to the main ProDoc).* ***Responsibility****: UNEP-GEF Task Managers, UNEP GEF Unit, UNEP Project Review Committee.* ***Timeframe****: future UNEP GEF projects.*

NCA – an additional activity added during implementation

349. Furthermore, additional activities were added in some countries, and the project suffered from what in military parlance is known as 'mission creep'. This included the project's work on Natural Capital Accounting (NCA). There has been some debate about the origins of the NCA element in the project as there is no specific mention of it in the ProDoc - there is recognition in the ProDoc that ES are not captured in national accounts but there is no project activities directly related to NCA or Green Accounts, etc, and they are not listed in the work programme or budget. It appears to have been added in in 2012 after implementation began, mostly due to interest from Trinidad and Tobago (Vietnam had an interest in this area but its NCA work was left to the World Bank in Vietnam, and no specific financial resources or activities were apparently allocated for NCA in Vietnam through the ProEcoServ project). This was encouraged by the ESE Unit in Nairobi, and activities associated with NCA/green accounting were 'captured' under activities related to Output 2.2.3 ('Ecosystem services value maps and valuation used to inform macroeconomic and sectoral planning'), although, as mentioned, there is no specific mention of green accounting or NCA in the project document related to this output. The MTE report[112] cautioned against continued effort and resources being allocated for this element and recommended that if it was included it would require: (i) a revision of the logframe, to include targets and indicators on green accounting so that progress could be monitored, any countries involved were adequately resourced to undertake the work, and the activity could be appropriately assessed in the TE of the project; (ii) a scoping of what outputs could be realistically achieved in the next 18 months; and, (iii) technical support via

[112] Bann, C. (2013). Mid-Term Evaluation of the UNEP GEF Project: Project for Ecosystem Services (ProEcoServ). UNEP Evaluation Office. August 2013.

ProEcoServ or through collaboration with other initiatives such as WAVES. Technical support via the ESE Unit was provided with consultants identified for examining NCA in Trinidad and Tobago with some basic work and training workshops carried out, but (i) was not fully addressed (no indicators on green accounting in the logframe (original or revised after the MTE) and (ii) was not properly undertaken in that there did not appear to have been any preliminary examination of what could be achieved before consultants were contracted (indeed the limitations to what would be possible in the 18 months remaining after the MTE were raised in the MTE report).

350. Changing the accounting system of a country is a long-term process, and the project's work in this area needed to be carefully scoped and planned with the participating governments so that the project was realistic about what could be executed within and by the project and in order to ensure work was significant and sustainable post ProEcoServ[113]. It was is not clear what was expected of this element of ProEcoServ, especially as there was no agreed set of activities related to NCA. It was also not clear what the mechanism was to endorse the inclusion of NCA in the project, and because there were no details on what the project aimed to achieve with the work on NCA (which intensified in the second half of implementation) and as there were no indicators or targets the work became essentially 'open ended'. In addition, the executing body in Trinidad and Tobago (UWI) had no expertise or history in this area, and was a not government departments responsible for dealing with national accounts, and there was a lack of existing relevant data and poor capacity in country (no one in Trinidad and Tobago with experience of natural capital accounting) so an expensive consultant had to be deployed.

351. Adding in NCA posed a significant challenge, especially given the project was already many months behind on delivery at the MTE, which had been recognized as overly ambitious with too many activities (see above) and with resources (financial and management staff) in Trinidad and Tobago already stretched. Consequently, the results were perhaps unsurprisingly less successful that other parts of ProEcoServ, although the work can be considered as an assessment of the status and needs for NCA, with useful scoping papers, and it has raised awareness of the subject and value of considering environmentally adjusted national accounts in Trinidad and Tobago (and in Vietnam the World Bank funded work has had similar effects).

352. The TE agrees with several interviewees views that 'the enthusiasm of some people on ProEcoServ rather ran away with them" (with both the countries and ESE Unit responsible here, the latter saw this as a new emerging field which should therefore be included in the project), and in the TE's view, NCA should have been considered as a follow up project and not just an extension of the current project (perhaps for GEF-6, with thinking developed during the last year built on a sustainability and follow-up strategy agreed at the final PSC meeting). The issue here is that if the activities on NCA had not taken place, it could have freed up resources enabling better delivery of other ProEcoServ activities that were in the original project agreed with GEF.

Overall, the project preparation and readiness was Moderately Satisfactory

3.6.2 Project implementation and management

Project management arrangements

353. Project execution arrangements were clearly identified for each country and at the overall project management level, with roles and responsibilities of internal partners (UNEP, CSIR, UWI, CEAZA, ISPONRE)

[113] The MTE consultant, who was experienced in green accounting at national level, noted that 'it is not realistic to think that a green accounting systems will be established within the project, however the project can play a key role in laying the foundations', and suggested that the World Bank's Wealth Accounting and the Valuation of Ecosystem Services (WAVES) initiative could inform the process and that any results had continuity post ProEcoServ, perhaps as a future pilot country.

generally clear and documented in the ProDoc, although some had still to be agreed at the early implementation stage (captured in individual PCAs).

354. ProEcoServ was designed as an internally executed GEF project with UNEP's Division of Environmental Policy Implementation (DEPI) - Ecosystem Services Economics (ESE) Unit as the Executing Agency (EA) of the project, responsible for all aspects of project execution. Originally, at the design stage the IA was to be UNEP's Division of GEF (GEF), but this was dissolved around the time the project started and the UNEP/DEPI/GEF BD/LD Unit operated as the GEF Implementing Agency (IA), with a supervisory and oversight role. As a result, unusually, both the IA and EA fell within the same Division in UNEP (DEPI). Whilst the GEF Task Manager (IA) and Global Project Manager (EA) were in different Divisional Units and had different First Reporting Officers, these First Reporting Officers both reported directly to the same Division (DEPI) Director so there was limited segregation between the IA and EA.

355. Consequently, there has always been the question of how independent oversight by UNEP of the project was likely to be (or would be seen to be), with the possibility of internal UNEP 'politics' and considerations interfering with management decisions on the project. The arrangement became further complicated as the original Global Project Manager later took on the role of the Task Manager for the project. It has been pointed out that this arrangement could have put the Implementing Agency function in an uncomfortable position at times of tension or disagreement, and compromised independence, and this issue of the degree of independence of the UNEP oversight and the potential for 'conflicts of interest' was raised both by the MTE and came up in several interviews during the TE. Unfortunately, it was not possible to interview either the former or current Director of DEPI while the TE consultant was in Nairobi about their management of this arrangement. The TE found some (conflicting) evidence of this during interviews, notably in relation to the promotion of the work on NCA which was not included in the original project design (see paragraph 349). There were also third-hand reports of other occasional differences of ecological infrastructure view between the TM and GPM and higher DEPI management but the TE found no confirmed evidence of significant or recurring problems or conflicts due to the IA/EA arrangement. Nevertheless, whilst there were several clear benefits from this arrangement, the external perception among some partners was that the ESE Unit made all the decisions on the project and the IA role was compromised. The TE understands that there are now clear guidelines on the oversight arrangements for internally managed GEF projects that recognise the need for separation of EA and IA, so this situation is not likely to reoccur. However, the TE concludes that the arrangement should not have been allowed in the first place, and despite the advantages, UNEP not have approved the GPM to later become the TM for the same project (OK if TM for other projects).

Project management challenges

356. The project has been generally well managed and administered by very competent national teams in the four target countries who deserve credit for delivering such a large complex project, and in the TE's opinion, the extra effort put into the project by all teams is a key contributing factor to its success. However, there have been significant project management challenges in some countries.

357. Project communications and co-ordination were a particular challenge in Chile because of the distance between CEAZA, based at La Serena, and SPA (two-hour flight to Calama then 1.5 hour by road to SPA). This contributed to the slow delivery during the first 18 months of the project in Chile (but not the only reason) when there was a relatively infrequent presence of key CEAZA staff at SPA (though there was a representative of the CPA employed part-time by ProEcoServ-CL). Following the MTE, the National Project Coordinator was replaced and the Executive Director of CEAZA took over the lead of the project in Chile. One of his first decisions was to establish a permanent local project presence (team of three people) within the municipality of San Pedro de Atacama. Although it then took some additional time to (re)build

relationships with local stakeholders, once the team was settled in and a project office established at SPA the frequency of meetings with key decision-makers and project activities at SPA increased greatly.

358. Importantly, the local CEAZA team comprised a geographer experienced in GIS community-based natural resources mapping, an experienced journalist who led on the awareness-raising and outreach activities, and an agricultural engineer, who was an Atacameña woman native to Toconao (small town close to SPA), who led the team with special responsibility for local liaison. Together this team was able to build a very strong relationship with most of the key individuals in the local communities. This location and mix of a permanent CEAZA team in the community, was a crucial turning point for the project and led to greatly increased output (and impact) of project activities. However, this 'redesign' of local project management meant that much of the work at SPA had to be delivered in just 18-24 months, rather than 4 years, which partly explains why there was insufficient time to ensure sustainability of the two DSS tools produced by ProEcoServ-CL.

Lesson 6. Establishing a strong independent project team on the ground at the project site (with an office), who understand local issues, and preferably with at least one member from the local community can enormously improve project stakeholder relationships and improve project delivery, ownership, and ultimately impact and sustainability. This is particularly relevant where the project's executing body is based distant from the field site, where communications can be difficult, and where there are contentious local issues, and given that UNEP does not have national country offices so able to offer in-country support (unlike other GEF IAs).

359. There were also challenges within the CEAZA research group at La Serena, with a change of hydrologists at beginning of 2014, which was not well received by government institutions at first, especially by DGA.

360. In the TE's opinion, Chile might have benefited from having greater project management input by UNEP with more site visits by the UNEP staff (as Vietnam had), either from Nairobi, or from the UNEP Regional Office in Panama. As it was, only one visit was made by the Global Project Manager which coincided with the PSC meeting held at SPA in 2013, so he had multiple commitments while there.

361. Another cause of difficulties was the relatively low budget for project management given the size and demands of the project, especially in the case of Trinidad and Tobago where for the first three years of the project management team members could only be funded on a part-time basis. This generated delays and introduced inefficiencies, and is one of the major reasons that Trinidad and Tobago did not deliver as much as perhaps it could have done. Indeed, it became clear early on in project implementation that the very limited capacity in Trinidad and Tobago would require a different approach in order to deliver key aspects of the work. Consequently, ProEcoServ-TT adopted a strategy of using a mixture of PhD students and consultants to undertake the technical work. While the use of PhD students is considered a good strategy to build (hopefully) long-term local capacity and reduce costs, this approach did lead to delays in delivery. Indeed of the three PhD students engaged with ProEcoServ-TT, only one finished his PhD before the end of the project (hence results were available); full results from the other two PhDs remain outstanding (although the research results produced by the students to date have been very valuable). It is suggested that in future, UNEP-GEF projects do not use (or restrict the use of) PhD students for projects with short timeframes - a 4-year GEF project with a typical 12-18 month led in time, is not long enough to guarantee results and analysis from a PhD, especially if the research is field-based.

362. It was also recognised that the ProEcoServ team in Vietnam would need support due to low capacity, especially technical expertise in ES modeling, and therefore the PMU at the UNEP ESE Unit in Nairobi, made more or less annual monitoring missions to Hanoi to ensure sufficient support was available. However, the major challenge facing the ProEcoServ-VT team was, as in the case of Chile, the distance between ISPONRE's base in Hanoi and the field site at Ca Mau. Ca Mau is Vietnam's southern most

province and only accessible by air from Hanoi via Ho Chi Minh City. Travel time and cost reduced the opportunities for direct interactions between the national and provincial teams, although they were able to communicate via internet and telephone. Again, the experience from Chile suggests that establishing a greater (independent) project team/technical presence in the province might have been beneficial.

Global management issues

363. Project management by the PMU/ESE Unit was generally successful, but ProEcoServ was a complex project with a very large number of activities and inputs from a large group of project partners operating in four countries across different regions (and time zones and different languages) and levels (global, national and local), which made it a challenge to manage and deliver. The first Global Project Manager responded well to this, helped by developing a large comprehensive spreadsheet-based tracking and reporting tool, which provided a 'road map' for project management (although it did mean more focus on the 'box ticking' and possibly meant less strategic direction given to the project).

364. However, there was a high turnover of key staff at UNEP HQ - there were three IA Task Managers, two Global Project Managers, two Chiefs of ESE Unit, each with different perspectives and interests, as well as two FMOs over the period 2010-2015 (late PPG phase to operational closure of the project) - which was an issue for the national project teams (reduced efficiency of interactions with UNEP in Nairobi). Of these, the most significant (most keenly felt by the country partners) was the loss of the first Project Manager (although he took on the role as the third TM so had an IA oversight role). It was decided that the replacement needed to have both good technical background and writing skills, in order to take the lead on compiling all the (largely technical) information that was due to be delivered during the last year of the project into a synthesis report, as well as project management experience which included organizing the final high profile international meeting of the project in Nairobi. The workload for the final year was very high, particularly because many results came in the last few months and some countries, notably Trinidad and Tobago, were late with their delivery. With the benefit of hindsight, the recruitment process to hire a new GPM should perhaps have put more emphasis on project management experience in order to secure sufficient support to ensure that the country level deliverables were completed effectively, with recruitment of a separate technical writer to lead on the synthesis and dissemination of the project results. It is suggested that in future UNEP should try and avoid changing a project manager during the critical final year of the project, which is often the most demanding, or go for a straight replacement (an experienced project manager).

365. Also, management of complex multi-country projects, such as ProEcoServ, would perhaps work better if UNEP support staff were able to take responsibility for specific countries over the period of implementation, which would give them and the partners the opportunity to build a long-term relationship that would facilitate administration and reporting.

UNEP's role as Executing Agency

366. Opinions on the role, usefulness and value of UNEP (DEPI's ESE Unit) as the GEF Executing Agency for ProEcoServ differed between interviewees. One group of individuals (both national and international) felt that UNEP's involvement 'did not represent value for money' for the project as the cost of UNEP's role as the EA was seen as very significant (especially compared to the funds going to individual countries), and some believed that CSIR in South Africa could have acted as the EA (indeed this was raised as a serious proposal during the PPG stage). On the other hand, another group of interviewees expressed the opinion that UNEP offered transparent management (but see paragraph 355), is considered a neutral body, and had the 'added value' of being able to access world class technical capacity support and advice and networks of

relevance to the project, and its involvement in other relevant on-going initiatives such as the MA follow up and the IPBES was viewed as another major strength.

367. In the TE's opinion, part of the reason for the questioning of the role and value of the UNEP HQ was that the results of Component 3, which UNEP had responsibility for, were not well communicated to project partners. UNEP HQ focused on publishing reports from the project (see Annex 10), and some of the interviewees did not see the extra value in this since they themselves were also publishing scientific articles. As one interviewee commented, "What is UNEP Nairobi doing above what we are already doing? What is it adding to this project apart from facilitating the flow of GEF funds?" The answer to this was never clearly explained. The same applied to linkage to some of the international initiatives that UNEP was to target through Component 3, e.g. IPBES. In future, UNEP needs to be clearer about the value it adds to project participants.

368. At the national level, it was felt that UNEP could have been more engaged in helping to access some of the non-environment ministries of finance as it was felt that UNEP had some leverage here, which was weak among the national team executing bodies. In the TE's opinion, this reflects a false view of UNEP's level of influence in the TE's opinion – UNDP or World Bank is likely to have more influence in this case. Indeed, one of the limitations of UNEP as a GEF IA is that it does not have a network of country offices like the other major IAs, such as UNDP, FAO and World Bank. For large complex projects such as ProEcoServ, this means that if UNEP takes the role of executing agency, it will need to ensure a greater management input, either directly from HQ (but costs high, particularly for a project manager, which leads to criticism - see above), perhaps through increased input from its Regional Offices, or through contracting out project management to outside bodies. The latter would probably provide better value for money as the costs of UNEP staff input is high. It should also be remembered that UNEP does not have a comparative advantage in managing large GEF projects (as an executing agency).

369. A common perception was that countries felt their main interaction with UNEP HQ was with reporting on activities and outputs and financial management and they had little strategic direction during the early stages of the project (pre-MTE) when national teams were struggling to make sense of the overall project, what they needed to do and the huge number of activities they had to act on (especially in Trinidad and Tobago) – they were not sure which activities were strategically most important and they should dedicate most time to. However, UNEP HQ had a different view on this pointing out that the use of SEA in TT and integrating the natural capital concept in the government policy papers were joint initiatives, the issue of strategic direction was always in the agenda of PSC meetings to guide the teams if they wished to raise the issue (and at the Chile PSC there were discussions on which policy areas to target and how).

Risk identification and mitigation

370. At the design stage, no 'high level' risks were identified but five 'medium level' risks are presented in the ProDoc. Mitigation measures to address these were suggested but many were rather general and weak (unclear whether they would work). Project risks and assumptions were regularly monitored throughout the project's implementation by project partners UNEP/DEPI and UNEP GEF Unit and recorded in the annual PIRs submitted to the GEF Secretariat, and adaptive management has clearly been applied by the PMU, to reduce these.

371. An analysis of the project's economic, social and environmental impacts is given in the ProDoc, although this is rather cursory (no specific impact assessment was undertaken) and specific stakeholder groups likely to be negatively affected is not presented. However, the project did aim to benefit poor vulnerable groups and women, indirectly through the promotion of (among other things) payment for ecosystem services (in Trinidad and Tobago) and linkage with various public sector works programmes in South Africa (see paragraph 327) and the project has benefited indigenous communities at SPA in Chile (see paragraph 249).

The project's performance in implementation and management is rated Moderately Satisfactory.

3.6.3 Stakeholder participation, cooperation and partnerships

Stakeholder and partner involvement and consultation

372. Stakeholder analysis, engagement and consultation during the project design period were good and well organized and had significant influence on the project's design. National meetings of stakeholders and discussions with relevant groups at the selected pilot sites fed into an overall project design workshop held in South Africa in 2010 with representatives from each of the four pilot countries attending. However, there were disagreements during the PPG stage, particularly about allocation of GEF funding to UNEP and the amount to be allocated to Trinidad and Tobago, and whether CSIR could play the role of the Executing Agency rather than UNEP's ESE Unit.

373. A detailed Stakeholder Plan is presented in the ProDoc with information on each group that would be involved in the project and an outline of their potential/likely role. Further stakeholder assessments were carried out by each country early on in project implementation, but no detailed assessment was made at the global level (see paragraph 215).

374. Stakeholders were reasonably well-defined in each of the four countries (less so at the global level) and actively engaged throughout the project, although, the identification of private sector partners and was rather superficial and generally a weak area for the project and engagement of non-environment sector ministries for mainstreaming poorer than hoped. The final reports of each country give a list of stakeholders and partners and a brief description of their involvement.

Lesson 7. Project designers and executing bodies need to have better identification at the design stage (certainly by inception stage) of the most important institutions to target for mainstreaming, particularly within government (planning, investment, business, finance and economics), and alliances established with them, as environment ministries and associated national scientific research centres/institutes are generally not the key decision-makers when deciding on national development policy. Along with this there needs to be a better appreciation of the concerns of the target audiences, e.g. economists in the ministry of finance, and the 'language' they use, e.g. contribution to GDP, jobs created, etc, and a better understanding of the demand for what the project can offer/create, which means key individuals from target audiences need to be engaged in the design process of a mainstreaming project from the very beginning, and ideally, should be part of the executing team. Mapping of ecosystem services and use of infographics appear to be particularly useful forms for informing decision-makers and the former is considered an essential tool for those concerned with planning.

Project partnership relationships and issues

375. Generally, the project built very good relationships with partners and stakeholders in all four countries, and partnerships were largely successfully managed by the national executing bodies (CEAZA, CSIR, UWI and ISPONRE) and the global PMU at UNEP's ESE Unit in Nairobi. Indeed, the strongly interdisciplinary teams of scientists, local experts, government authority decision makers and other stakeholders in each country in the joint design, knowledge production and implementation of the project has been one of its strengths and major reasons for its success. However, as expected, some arrangements worked better than others.

376. In Chile, for instance, although ProEcoServ-CL built some excellent relationships with local stakeholders at SPA and provided good and very welcome support to local communities in the area, there was a difficult relationship was between CEAZA and DGA, particularly with the DGA regional office in Antofagasta. Contact with DGA was initially established with the aim of discussing how the water management DSS for SPA would be developed and deployed and what capacity would need to be built to

be able to use it. Unfortunately, DGA did not feel they were sufficient involved (highlighted by the MTE but not properly addressed), and appear to have rejected the results of the water model from SPA and the DSS tool for water management.

377. Although the DGA regional representative, based in Antofagasta, attended some workshops and meetings at SPA, and there was a formal written request (known as an 'Oficio'), between DGA and the project, DGA does not officially approve of the model and is not endorsing its use or distribution. However, when questioned about the specific reason for this it was clear that at least one issue with the water balance model was that the work (funding) to develop the model had not gone through the DGA regional office, and there continues to be a rather strained relationship with CEAZA. This highlights the need for project design teams to involve the relevant bodies from the very beginning of the design process and keep them regularly informed.

378. On the other hand, ProEcoServ-CL has helped reduce conflict by bringing people together. Historically, there has been a lot of mistrust between different stakeholder groups at SPA in Chile (national government, municipal authorities and local communities, especially indigenous groups, and private sector interests, especially mining and, increasing, tourism companies operating in the region). Establishing a local team, headed by a local Atacameno woman at SPA following the MTE, and a local project steering committee with all major groups represented, has helped to build trust, improve relationships and reduce tensions between parties over a variety of issues, and helped build a strong local platform for future collaboration on ES and other environmental issues. As one interviewee put it, the project has helped to 'create a neutral, non-political space to meet and discuss common issues'. This has certainly one of the successes of the project (although not captured in the logframe or sufficiently reported on).

379. Surprisingly, for such a large complex project with the number of stakeholder groups involved, there was no project-specific Partnership Strategy[114], which set out who would be involved (and why), how, when and with what resources (with a budget to facilitate involvement). This would have helped focus greater attention on partnership development and perhaps helped to avoid/resolve some of conflicts/disputes between partners from early in the project.

Private sector involvement

380. There was the expectation that ProEcoServ would foster public-private partnerships and sustainable business initiatives for SMEs to become engaged in ecosystem management and to incorporate pro-environment and pro-poor business strategies (Output 2.1.2), but involvement of the private sector in ProEcoServ has been mixed.

381. Of the four pilot countries, South Africa has been most successful in engaging with the private sector (Output 2.1.2), notably at Eden where one of the major agricultural insurance companies in the country (Santam) was a major partner in the work (even providing some of the funding) and has adopted the approaches and tools developed through the ProEcoServ work and is promoting them more widely within the insurance sector in South Africa (it has become a keen 'champion' of the ES approach) to reduce environmental risk [115]. According to interviewees, the insurance industry in South Africa is increasingly concerned about the risk associated with poor ecosystem management and the role land management can play in reducing disaster risk in South Africa. Eden was seen as a highly successful test case for how to address this using an ecosystem services approach.

[114] A specific partnership strategy, developed as part of the project document, has been a requirement of UNEP-managed projects since November 2014.

[115] See - http://biodiversityadvisor.sanbi.org/wp-content/uploads/2014/11/201411_Insurance-Sector-Collaboration-Case-Study.pdf

382. For the other three countries, engagement was weaker[116] and there was the realisation that the most project could achieve with the private sector was just to get concept across, as the focus of the project was on more government decision-making bodies, and that serious engagement would have required a different set of executing bodies, which were largely research-focused institutes and had better connection to government agencies than private sector. Again, this was an indication that the project was too ambitious in design.

383. For instance, in Chile although SMEs and entrepreneurs in the tourism sector in the *comuna* at SPA were identified and a specific 'ecosystem services strategy' for SMEs developed[117], only a few individuals from the private sector tourism industry attended project meetings and workshops at SPA and the overall connection with the private sector was weak. Indeed, it was not clear to the SPA project team what was required for this output to foster 'public-private partnerships for ecosystem management' (Output 2.1.3), and no formal public-private sector cooperation agreements were established by the project (all were informal). Also, although the strategy was disseminated, it does not seem to have been adopted by the target groups and is not considered by the municipal authorities. However, the strategy could be reexamined in light of the recent draft development plan for the Atacameño community and renewed interest by the local SERNATUR office at SPA especially if the tourism DSS is formerly adopted soon.

Linkage and lesson learning with other initiatives

384. The ProDoc lists a large number of relevant GEF and non-GEF projects across the world and the intention was to explore opportunities for cost-sharing on common activities, events, lesson learning, and other linkages and synergies where appropriate. However, other than invitations to attend project workshops[118], no mechanism was developed to link and work with them, and there was little substantive contact, collaboration or sharing of results and lessons learned with these projects (it was the ESE Unit's responsibility to direct this for the project). Again, linkage probably could have been improved if there had been a thorough assessment of the opportunities for mainstreaming project results at the global level. As mentioned, linkage with other UNEP projects was not as good as it could (or should) have been e.g. with the UNDP-UNEP Poverty Environment Initiative (surprising given that poor communities rely heavily on 'unseen' ES), the work being done on forest/ecosystem accounts in Kenya, Gabon and Morocco by DEPI at UNEP in Nairobi, or even between the UNEP-GEF Uganda Payment for Ecosystem Services project[119] which has had same TM as the ProEcoServ. Indeed, one comment received by the TE was that "ProEcoServ is an island within UNEP", and linkage to other relevant initiatives within UNEP needed to be improved. Also surprising, was the poor connection with UNDP projects, whose biodiversity and climate change portfolios include many with a focus on ES including development of DSS tools and mainstreaming of ES approaches.

385. In the evaluator's experience, poor linkage between GEF projects, including between GEF projects implemented by different UN agencies, is common – much is made of potential linkage to other relevant GEF and non-GEF projects in project documents but when it comes to implementation there is little, if any, interaction. Future projects need to find more creative ways to organize their meetings to talk about linkages, synergies, lessons learned. The question is how to incentivize the cross-collaboration between

[116] It should be noted though that the executing body in South Africa and its main partner – CSIR and SANBI – had a history of public-private cooperation on ecosystems management prior to the ProEcoServ project on which to build (another of the comparative advantages of the involvement of the CSIR and SANBI in the project).

[117] Strategy of ecosystem services for small and medium organisations and firms in San Pedro de Atacama, Chile. October 2014. Cristian Geldes. ProEcoServ Project, CEAZA, La Serena, Chile.

[118] Initiatives that were contacted and involved in project workshops and trainings include UNEP's Regional Offices, GEF's Danube PES Project, LifeWeb Project, OECD's biodiversity and ecosystem services activities, UNEP/UNDP PEI, WAVES, UNstat, UK ESPA, EU Environmental Agency, GLOBE.

[119] This project was designing and testing a PES project in the forests of Western Uganda over roughly the same period as ProEcoServ and might have offered some valuable lessons or opportunities for technical support to the group in Trinidad and Tobago who have struggled develop their own PES scheme for the Caura Valley.

projects within and outside of UNEP, which can probably only be achieved if the project managers have this activity written into their workplan with a specific budget line (in the ProDoc) to meet associated costs, with performance indicators and a reporting requirement to line managers for these activities, all set within a more coherent plan – treated as part of a partnerships strategy – that needs to be developed at the inception stage (updated on annual basis). Such an exercise would also help support better integration of the GEF and non-GEF projects within UNEP's larger subprogrammes, and be a pilot model for how to better link projects (something which managers at the ESE Unit should be doing more).

Recommendation 7. *It is recommended that (where relevant) a specific activity set with dedicated budget lines and performance indicators and targets that seeks to establish collaborative partnerships and linked activities with other relevant projects (especially mainstreaming projects) both within and outside of UNEP is included in future UNEP-GEF projects. This activity list needs to be written into the work plan at the design stage.* ***Responsibility****: ESEU, other relevant units in DEPI, UNEP GEF Coordination Office, GEF Task Managers and individual project managers, and coordinated by the EMSP Coordinator at UNEP.* ***Timeframe****: future GEF projects at design and early implementation phases.*

386. In the TE's opinion, it would also be valuable if UNEP undertook a joint lesson learning exercise of all current and recently completed projects with a focus on ecosystem services, covering assessment, valuation, mainstreaming, PES, etc. Given that there are a wide range of projects within the UNEP portfolio covering multiple scales (local to global), countries, and ecosystem types, and approaches (testing the PES approach, identifying practical steps to operationalising PES schemes, ES assessment, modeling, valuation, natural capital accounting, mainstreaming of ES, etc), bringing together representatives from the relevant teams to exchange experiences could add extra value to the portfolio which has been lacking a more programmatic and strategic analysis to date. This would also help improve the sustainability, impact, replication and catalysis of individual project results, as well as helping UNEP to identify the most important issues and priorities for action in relation to its work on ecosystem services, and therefore what projects and initiatives UNEP should it be developing, supporting and funding both through GEF and under its own Programme of Work.

Stakeholder participation, cooperation and partnerships is rated Satisfactory.

3.6.4 Communication and public awareness

387. Communications has been a significant feature of the project in all four countries, as would be expected given project focus on mainstreaming ecosystem services into decision-making, and communication, dissemination and capturing lessons learned was also a central feature of the global element of ProEcoServ (under Component 3). A Communications Strategy for the global level activities of ProEcoServ was developed in 2012-2013 and similarly communication strategies were developed for each country[120], although it is not clear how the global and national strategies related to one another.

388. A project website (www.proecoserv.org) was established, which has served as the main outreach tool at the global level and been regularly updated (although not working for some months around the TE). National project websites were also established in Chile (http://www.proecoserv.cl/ and http://proecoserv.ceaza.cl/), South Africa (http://www.csir.co.za/nre/ecosystems/ProEcoServ.html), Trinidad and Tobago- (http://www.proecoservtt.org/), and Vietnam (http://proecoserv.com.vn/index.php/en/, with both English and Vietnamese versions). Numerous briefings, reports, posters, brochures, videos, and other communication products have been produced by the project for specific target audiences, but there has also been also significant general public awareness

[120] These were prepared under Outputs 2.1.1 (a systematic outreach and dissemination strategy on ecosystem services developed and executed in the four participating countries) and 3.1.2 (outreach strategy developed to engage with policy platforms on ecosystem services (e.g. BD-related MEA COPs, IPBES, IHDP, GLOBE, TEEB)).

raising through participation and presentations at conferences and forums, along with engagement with civil society (the latter often through NGO partners, e.g. WWF). Most countries also had a final official closing workshop, during which the main results of the project were presented and copies of reports distributed.

389. ProEcoServ-SA put a particularly heavy emphasis on communication (again unsurprising given its focus on mainstreaming), which has produced some particularly interesting results. During the inception of ProEcoServ-SA, an analysis of biodiversity communications material was conducted to determine the effectiveness of methods[121] and materials in generating support and action for biodiversity conservation (SANBI, 2012[122]). Key messages were identified and the project produced a three-year communications strategy and toolkit[123]. This provided the biodiversity sector with new language and a set of communication tools, including 10 local case studies[124] with which to 'make the case' for biodiversity and ecosystem services. The case studies tell a range of stories about the importance of ecological infrastructure, e.g. '*Washed Away*' presents a strong case that careful farming practices, infrastructure planning and development should dovetail with keeping watersheds healthy in order to avoid costly damage caused by flooding, and '*The Buzz Factor'* highlights recommendations for land management to maintain honeybee populations ensuring "free" pollination services. [Parallels with work on pollination ES being undertaken in Trinidad and Tobago which has not been promoted as effectively] A key feature of the communication strategy revolved around a campaign that aimed to personify biodiversity and ES in order to connect with decision makers within the targeted sectors. The work undertaken at Eden jointly with the local municipal authority and insurance sector is particularly impressive but the TE feels that this has not been promoted by UNEP as much as it should have at the global level and it deserves a better, more in-depth write up as a case study of how to successfully encourage the insurance industry to consider and adopt an ecosystem management approach as a way to benefit their business, environment and society, working in partnership with researchers, municipal authorities and NGOs.

390. Interestingly, ProEcoServ-SA chose not to focus on economic valuation or PES models due to mixed experience with these in South Africa. Instead it built much of its work around a framework focusing on investing in 'ecological infrastructure' (so not restricted to simply a 'financial value' message). This aligned strongly with national development goals in South Africa, and its emphasis on labour-intensive ecosystem management resonated with national goals of job creation and poverty alleviation[125]. ProEcoServ-SA produced a useful factsheet on ecological infrastructure, defining the concept and making explicit these links to national development goals[126]. This approach was clearly successful in South Africa and similar approaches, such as the EU's green infrastructure concept[127], have also shown similar promising results. It is clear that the concept works in some countries. Consequently, it would be worth UNEP ESE Unit publicizing the South African experience more widely within and beyond UNEP, in addition to valuation and natural capital accounting approaches.

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121 Results suggested that the three most effective ways of communicating biodiversity's relevance were: 1) Biodiversity is a national asset with immense economic significance; 2) Biodiversity is a legacy important for our children and their children; and 3) Practical solutions for protecting and enhancing biodiversity should be highlighted.

122 http://www.sanbi.org/sites/default/files/documents/documents/56354-making-case-messaging-and-3-year-action-framework-final.pdf

123 http://www.sanbi.org/sites/default/files/documents/documents/mtc-case-study-development-toolkitmediumresolution.pdf

124 http://www.sanbi.org/news/ten-compelling-case-studies-making-case-biodiversity

125 The final report for ProEcoServ-SA points out that the shift to 'investing in ecological infrastructure' still retains the market commodity value of ecosystems, while at the same time framing ecosystems as a public good. This shift in terminology acknowledges the need for national financing mechanisms to explicitly consider funding the management of ecosystems for the benefit of national development goals.

126 See http://biodiversityadvisor.sanbi.org/wp-content/uploads/2014/02/Ecological-Infrastructure-Fact-Sheet-2nd-edition.pdf

127 See - ec.europa.eu/environment/nature/ecosystems/index_en.htm

391. The maps and statistics generated by ProEcoServ have also provided some very compelling and convincing messages that have struck home with national politicians and decision-makers. For instance, in South Africa, a key message was that strategic water resource areas make up only 8% of the land area of the country but provide a staggering 50% of the water, support about half of the national population, and contribute to more than 60% to the national economy, yet only 16% of their surface area is legally protected - in other words, protecting and sustainably managing this relatively small area of land would contribute enormously to South Africa's water security (especially important given the country's drought-prone nature), population and economy. According to interviewees this message found traction in two major national development planning processes - national development planning and national water resource management. The above information highlights the risk of losing an economically and socially essential ES supply if badly managed, a message which perhaps hasn't come across strongly enough through ProEcoServ.

392. In Chile, there was a particularly interesting experience, where there was a criticism early in the project that information on the project was not being communicated to the communities in words that they could understand. This was recognized by CEAZA who installed a team of three with a team leader who was an Atacameña woman from the *Comuna,* and a journalist at SPA whose job it was to improve communication. The team leader especially was able to identify relevant entry points or discussion and communication and 'translate the science of ES' into terms that held meaning for the indigenous groups of the area, using a different 'frame of reference'. For instance, rather than talking about the dynamics of water balance over the Salar with farmers, the team used models from local farming practices e.g. water in irrigation ditches, and other approaches included mapping ecosystem services to local landscape features and vegetation types. Interestingly, the indigenous groups have a local leader – known as the '*Cultor'*- who holds and communicates the traditional knowledge of the people (mostly contained in songs and stories) and performs at meetings and fares to ensure that such knowledge is passed on. The team leader was considered as an equivalent but for science – a '*Cientora'* – one who holds and communicates the scientific knowledge of the people. The local team then not only strengthened ESs knowledge exchange between local, regional and national levels, but also generated a community-based understanding of ES, using terms that the local indigenous community could relate to and therefore were more likely to adopt. Given the much more active engagement of the indigenous groups in public debates on developments that could impact the environment in the region, this has clearly been successful, although, after interviews with local people at SPA, it is clear that the experiences and lessons learned from this exercise have not been captured properly in project reports. They should be as it would add value to the ProEcoServ and the challenges faced in trying to translate the science into local knowledge would be an interesting case study to write up.

393. There was little direct linkage with UNEP's Division of Communications and Public Information (DCPI), which could perhaps have helped to better promote the project's aims and results more widely within UNEP and at the international level. DCPI were involved at the later stages of the project in advising on the production of infographics for the communicating key messages (very good, and considered effective by recipients).

394. In terms of improving dissemination at the global scale it is suggested that the ESE Unit investigates linkage to the UNEP-supported Global Universities Partnership on Environment and Sustainability (GUPES)[128], which seeks to increase the mainstreaming of environment and sustainability practices and curricula into universities around the world as this might offer opportunities to further disseminate and mainstream some of the project's results. UNEP's South-South Co-operation Exchange Mechanism[129] is another possible route for promoting ProEcoServ outputs.

[128] http://www.gupes.org/index.php?classid=3234

[129] http://www.unep.org/south-south-cooperation/case/Default.aspx.The Solutions section showcases initiatives and projects that can be

395. Most countries attempted to assess the effectiveness of their communications strategy and products in changing awareness and understanding through baseline and follow-up surveys[130], which usually showed improvements in both measures, although most of these surveys were not very rigorously designed or the sample size was rather small scale. More details are given in section X.X.

The project's performance in ensuring communication and public awareness is rated Satisfactory.

3.6.5 Country ownership and driven-ness

396. The project was built on nationally and locally identified priorities/follow-up to the MA/SGAs and fitted well with national priorities and plans (see section 3.1.2), which argues for high ownership.

397. Although there has been good involvement of relevant stakeholders during both project design, some interviewees expressed the opinion that they did not feel strong ownership at the beginning of the project because, in part, they did not really understand what the project was trying to achieve (too many activities, confused logic, etc). This improved following the MTE when the project structure and content was reviewed and revised.

398. The insertion of some elements of the project that were 'added in' at the design stage or later, apparently by UNEP HQ, also increased the sense of lack of ownership. These included the Lesotho-South Africa transboundary element which was not originally considered by the South Africa project proposers during the early design stage but was added in as an extra element following encouragement by UNEP Nairobi, the PES project element in Trinidad and Tobago (apparently little discussion with Trinidad and Tobago at the design stage on this element but originally seen as a way of capturing funds from the Green Fund. Note no other countries had a PES element, and the project's work on NCA was added in after project approval (see paragraph 349).

399. Although ProEcoServ linkage with ministries responsible for planning in the target countries has been good in some countries, especially Trinidad and Tobago and Vietnam, involvement and/or linkage with ministries of economics, finance, and other non-environment sectors has not been as strong as hoped for. In the opinion of a number of interviewees, part of the reason for this was that in-country project execution was undertaken by (largely science) research-orientated bodies in Chile (CEAZA) South Africa (CSIR) and Trinidad and Tobago (UWI), rather than economic institutes, so the understanding of the decision-making systems and processes within say the ministries of finance was not strong (it would have been helpful to have included some government economists as part of the PPG team, or to have involved them more centrally in the design). However, there was good linkage with and ownership by agencies dealing with disaster and water management sectors, notably in South Africa.

400. In Trinidad and Tobago, the TCPD has taken ownership of the maps and valuation results on ES provided by the project and intends to integrate them into the NSDS. However, again ownership of project results and products in Trinidad and Tobago has been mixed with the Ministry of Agriculture showing little interest in the ProEcoServ-TT's pollination work, and the highest levels of the Ministry of Finance has not been receptive to adopting NCA.

401. Country ownership and drivenness was relatively good in Vietnam, at least among Central Government, which was expressed by the active engagement of the Ministry of Planning and Investment and establishment of government technical committees. Ownership at the provincial government and

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replicated in the South for sustainable development in the areas of agriculture, energy, environment, technology and water.

[130] It should be noted that although there was a specific indicator in the logframe – *'Level of awareness among decision makers and stakeholders about the importance of ES, and levels of use of ES-related tools'* as a measure for Outcome 2.1 (*'Increased awareness, understanding and level of involvement of targeted stakeholders (i.e. government authorities, private sector, ecosystem service users) in the integration of ecosystem services management considerations into policy making processes in the pilot countries'*, no quantified measurements of this were given in project reporting.

stakeholder level where the project is being implemented was reported to be low at the time of the MTE, and it is not clear whether this improved (the project had to rely heavily on foreign consultants to deliver the outputs at Ca Mau.

402. At the local level there has usually been good ownership, often due to the direct interaction of project team members. The installation of a permanent local staff in SPA in Chile, for instance, in the beginning of 2014 (with a project office), for instance, facilitated much stronger communication and relationships between ProEcoServ-CL and communities and organizations at the local level and the project became more participatory and community owned, although some of the products of the project's activities still do not have high ownership, notably the two DSS tools (see paragraph 301).

403. As mentioned previously, the project's deliberate focus on co-production of knowledge, especially in South Africa and Chile, where participants provided crucial information, and systematized and validated data, has greatly helped to build and increase ownership (see paragraph 252).

Country ownership and driven-ness is rated Moderately Satisfactory

3.6.6 Financial planning and management

404. A detailed budget (Table 6) was presented in the usual form as an appendix in the ProDoc. There were no obvious deficiencies, although there were large differences in the GEF funding allocated for the different project components, with Component 3 (science-policy interface) receiving only US$580,000, which is less than the total for project management (Component 4).

Table 4. Project Budget by component and source of financing

Project Components	GEF Financing		Co-financing		Total ($)
	($) a	%	($) b	%	c=a+ b
1. Policy Support Tools	**2,859,474**	26%	**8,290,238**	74%	**11,149,712**
2. Policy Environment	**2,228,163**	19%	**9,449,954**	81%	**11,678,117**
3. Science-Policy Interface	**580,000**	36%	**1,044,359**	64%	**1,624,359**
4. Project Management	**629,000**	43%	**836,000**	57%	**1,465,000**
Total Project Costs	**6,296,637**	**24%**	**19,620,551**	**76%**	**25,917,188**

405. The estimated and actual project costs as well as the expenditure ratio (actual/planned costs) are summarized in Table 7 below which shows a close fit between actual and expected expenditure, except for Component 3 although there are some remaining funds which may need to be spent on this Component in relation to the recommendations in this report. As can be seen from the figures in the table, the actual project costs up to 17 June 2016 (so post-operational closure) amounted to 98.9% of the original budget, but with some US$70,000 remaining. This relatively large amount was apparently due to an 'accounting error' within Umoja that occurred sometime after June 2015.

Table 5. Summary of project expenditures

Component/ Sub-component/Output	Estimated cost at design	Actual cost	Expenditure ratio (actual/planned)	**Balance**
COMPONENT 1 – Policy support tools	2,859,474.00	2,867,532.68	100.28%	(8,058.68)

COMPONENT 2 – Policy environment	2,228,163.00	2,253,195.47	101.12%	(25,032.47)
COMPONENT 3 - Science policy interface	580,000.00	451,970.36	77.93%	128,029.64
COMPONENT 4 - Project management	629,000.00	652,043.55	103.66%	(23,043.55)
Total	6,296,637.00	6,224,742.05	98.86%	71,894.95

406. Delays in the early part of the project caused spill over between years and resulted in small under- and over-expenditures, and there was some reallocation of funds between budget lines following recommendations from the MTE to reduce and consolidate national activities. As mentioned, the most significant discrepancy in budget lines is that for Component 3, but this was to include the estimated US$17,000 allocated for the TE.

407. Spending on countries was more or less in line with what was expected (Table 6).

Table 6. Project Costs (by country and global level)

Country/global element	Estimated cost at design	Actual Cost	Expenditure ratio (actual/planned)
Chile	1,022,000.00	1,021,629.00	99.96%
South Africa	1,650,000.00	1,644,842.00	99.69%
Trinidad and Tobago	1,021,994.00	971,739.00	95.08%
Vietnam	1,190,919.00	1,170,930.00	98.32%
	4,884,913.00	4,809,140.00	

Project cost-effectiveness

408. Use of expensive international experts has been limited wherever possible. However, in the case of Trinidad and Tobago and Vietnam, where there was limited specialist technical capacity it was necessary to hire foreign consultants to run training workshops and support specific project activities, e.g. design of PES scheme for the Caura Valley. CEAZA in Chile and CSIR in South Africa had sufficient in-house expertise (or were able to draw on national support in most cases) not to need to invest in expensive international consultants. International consultants were also involved significantly with the workshops organized by the ESE Unit, such as those attached to PSC meetings.

Project co-financing

409. In terms of project co-financing (summarized in Table 9 but with more detailed breakdown in Annex 8), the total of US$19,620,551 was confirmed as being available when the ProDoc was signed. This was considered a good level of co-financing given the amount of GEF financing (a 1:3.1 GEF:co-financing ratio). However, co-financing was dominated by a single very large contribution from one source in Trinidad and Tobago – US$ 10,826,674 from the Green Fund (representing 55% of all co-financing pledged). In addition, the majority of the co-financing was 'in-kind', with relatively little 'cash' co-financing (a Cash: In-kind co-financing ratio of 1:10.85), which is judged as a poor.

Table 7: Summary of project co-financing

(Type/Source)	Financing				Disbursed
	(US$1,000)	(US$1,000)	(US$1,000)	(US$1,000)	(US$1,000)

	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
– Grants	1,000	872	506	766	299	166	1,805	1,805	
– Loans									
– Credits									
– Equity investments									
– In-kind support	1,990	2,702	12,375	3,621	3,639	3,314	18,004	9,638	
– Other (*)									
-									
-									
Totals	2,990	3,575	12,881	4,387	3,938	3,480	19,810	11,442	0

* This refers to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

410. However, as with most GEF projects, the calculation of each co-financing contribution is opaque, and many of the figures listed for co-financing appear rather arbitrary, e.g. US$200,000, and clearly not calculated using real-world figures (they are 'guesstimates' at best). Although it was not in the Terms of Reference for the TE to investigate the co-financing, on the basis of the known figures and interviews, it is debatable whether some organizations listed in the ProDoc as co-financiers contributed significantly in terms of co-financing, e.g. the mining companies such as SQM (US$100,000) and Minera Escondida Limitada (US$ 100,000) operating in the SPA region, Chile, who (apparently) were not even willing to provide hydrological data to the project for the modeling. In other words, the co-financing figures should be treated with a certain amount of skepticism. In addition, UNEP is listed as pledging US$2,764,690, which represents just over 14% of the co-financing total, but it is not known how this figure was arrived at or what exactly it was intended to cover. Having said that, given that there were two no costs extensions, the in-kind co-financing contribution was likely to be even higher, e.g. in terms of additional UNEP staff time.

411. It also worth noting that the Green Fund in Trinidad and Tobago (apparently) committed over US$ 10 million for the Nariva Swamp Restoration Project Carbon Sequestration and Livelihoods Project (NSRP), has been counted as co-financing for the ProEcoServ project. This is the single largest portion of co-financing for the overall ProEcoServ project, representing some 41.8% of the in-kind co-financing, while the GEF funds going to Trinidad and Tobago represent only 16.2% of the overall total. However, the NSRP predates the ProEcoServ and has not received any direct financing from the GEF funds and only links weakly with ProEcoServ (apparently through Outcome 1.2). In reality, it is a parallel initiative that was 'captured' by the ProEcoServ design team in order to fulfill the GEF requirement on the GEF:co-financing ratio. It should also be noted that this co-financing from the Green Fund was actually to be delivered over a longer period of 8 years but when the pledge was made there was an incorrect assumption that the entire sum would be spent over the 4 year time period of ProEcoServ. Nevertheless, over US$4,523,000 had been disbursed up to August 2015, which still represents the largest single amount of co-financing by some way.

Leveraged contributions

412. There was considerable additional funding leveraged during the lifetime of the project in all four countries documented in the final national reports. Although full figures are not available for all countries (not reported on by Chile in its final reports) this was substantial in the case of Trinidad and Tobago (US$4,523,833) and Vietnam (US$1,366,486), and indeed the true figures are likely to have been higher as they do not include the cost of in-kind financing for supporting the TE during the evaluation. Whatever the

exact figures, the project partners managed to leverage what was clearly very substantial additional co-financing for which they deserve praise.

Financial management and reporting

413. According to interviewees, the usual UN procurement processes were applied by the executing partners through a competitive bid process with a minimum of three bids required. Quarterly financial reports and 6-montly progress report have been submitted by pilot countries. Based on these reports, financial reports and semi- annual progress reports have been submitted to GEF.

414. GEF funds were provided through UNEP which were then routed to executing partners. The most significant challenge in financial management or reporting mentioned by interviewees was serious delays in the transfer or partial payment of GEF funds from UNEP in Nairobi to the country executing body, with delays of often several months (which also severely affected the TE). These delays increased in the final 6-8 months of the project following the introduction of a new (IT-based) resource management system, called 'Umoja', to the central UN Secretariat in New York, to which UNEP is linked. At the time of the TE report, final payments for some country had still not paid (the TE was informed about this by Trinidad and Tobago[131] and Vietnam) and this was causing not just financial problems in the countries, but significant reputational damage to UNEP, and even during the drafting of the TE report there were still 'teething problems' with Umoja.

415. Interviews with UNEP staff suggested, although contact with both Global Project Managers had been good, efficiency of financial management could have been improved further if the Financial Management Officers (FMOs) had been briefed more regularly throughout the project's implementation and there had been an opportunity for the FMOs to learn more about the project and understand its aims and priorities as well as what was likely to happen over the coming 6 months (applies to all UNEP projects), especially as there have been challenges following the introduction of Umoja. Consequently, it is suggested that UNEP TM and project managers seek to improve coordination with FMOs, with clearer communication on the status of the project (perhaps standardised for the FMOs), formal (one hour) meeting with the FMO every 2-3 months, offering the FMO the opportunity to ask questions and can have a discussion on the challenges of the project, funds available, etc. It would also be helpful if FMOs were introduced to any members of project team who come to NBO as it is makes for more effective relationships if an FMO can 'put a face to a name', which is viewed as especially important under the new Umoja system.

416. It should be noted that it took many months for the TE to obtain the financial data from the UNEP office in Nairobi. This delay, along with the late payments of national invoices is the reason for the rating as Moderately Satisfactory. The standard UNEP financial management rating table with a breakdown of the overall rating is given in Annex 9.

Overall project financial planning and management was Satisfactory.

3.6.7 Supervision, guidance and technical backstopping

417. UNEP supervision was largely provided through a Task Manager (TM) based in Nairobi. . There were three TMs during the project's lifetime, the first one covering the period 2010-2013 including the PPG stage; the second took over in November 2013 for 11 months as a temporary TM; and the third TM, who had been the first Project Manager, took on responsibility for the project in October 2014. The TMs ensured that the workplan and reporting were carried out as close to time as possible, and the project partners considered supervision and support by the TMs to be generally good.

[131] UNEP Evaluation Office: At the time of the stakeholder review (9/2016) Trinidad and Tobago contact persons informed that the issues had been solved.

418. The project established a global level Steering Committee (PSC) which was composed of UNEP/DEPI, UNEP/DGEF (superseded by the UNEP GEF Unit) as well as representatives from the national executing agencies from each of the countries, i.e. CEAZA, CSIR, UWI and ISPONRE, and external experts with relevant experience in ES studies, MA sub-global assessments and economic valuation worldwide, identified through UNEP/DEPI's international network. The function of the global PSC was to provide overall project oversight, evaluate project progress, provide strategic directions for the implementation of the project – both at national and global level – and to maintain and promote the necessary inter-institutional coordination outside of the project so as to encourage wider dissemination and adoption of ProEcoServ findings. Some PSC members also provided peer-reviewing of project reports. Annual meetings of the PSC were listed in the project's Workplan, and a separate budget for their meetings was identified at the project design stage.

419. There were rather mixed opinions on the value of 2-3 day PSC meetings. Most project participants from the four countries found them useful with the opportunity to exchange experiences and met with 'experts', although meetings were short usually with a training workshop and questions were raised about their costs (value for money), the major expense being international flights. It was considered especially disappointing that there was generally very little direct interaction between project teams and committee members outside these meetings. Since PSC are a requirement for UNEP-GEF projects, it is suggested that in future UNEP consider establishing a more formal contractual relationship with PSC members (at least for the professionally trained ones), as they currently participate for free (or their host institution covers the costs of their time). One option might be to pay members an honorarium to provide targeted input as part of the PSC, and in appropriate cases, perhaps expand their role to a mentoring role, which might have been useful in the case of Trinidad and Tobago since it lacked a senior economist on the island for most of the project's duration.

420. Various forms of national level steering and advisory and technical committees with wide stakeholder representation were also established[132]. In the case of Chile only a site level committee was established as it was considered essential to ensure local stakeholder buy-in, and national level agencies sent representatives from their regional offices in Antofagasta, although the extent to which local (non-national level) stakeholders were involved in project governance in other countries, namely Vietnam, was not clear to the TE.

421. However, while the ProDoc has Terms of Reference (ToR) for the global PSC none are presented for the national and local level technical and advisory committees and their operation is only described in general terms. Consequently, there was some confusion over roles and responsibilities among some members of these committees, e.g. on the steering committee at SPA in Chile. In some cases, these committees were seen as routes to facilitate uptake of the findings of the project more widely within government and the private sector, e.g. in Trinidad and Tobago.

422. Members of steering committees were expected to assist in promoting the project and its results within their institutions and beyond, acting as 'champions' for the project, and considered a key route for catalysis, upscaling and replication of project results. However, in some cases, keeping the members interested and motivated took a lot of effort, and it was very difficult to convene meetings with the majority of members. In Trinidad and Tobago, for example, members held relatively senior positions and mostly overcommitted and attended voluntarily and because most of the project results did not become available until after the second half of 2014, many Steering Committee members had already lost interest and attendance became poor. The project management team tried to organize quarterly meetings at the beginning but it was later decided that members would be engaged as necessary.

Overall UNEP supervision and backstopping were Moderately Satisfactory.

[132] Details of membership of these committees are given in national project reports.

3.6.8 Monitoring and evaluation

M&E design

423. The Monitoring and Evaluation (M&E) was designed according to UNEP's standard monitoring and evaluation procedures. As noted, the project's logframe included objectively verifiable indicators of achievements, sources and means of verification for the project outcomes and outputs, and a timeframe for monitoring activities is specified in project's M&E Plan. Organisational arrangements and responsibility for project level progress monitoring were specified in project documents and the project identified a specific budget for M&E. Appendix 5 of the ProDoc sets out the workplan, Appendix 7 the costed M&E plan, and Appendix 9 of the ProDoc sets out the standard UNEP ToR for the Terminal Evaluation and a Mid-Term review is also identified in the main text of the project document.

424. The project was developed prior to the introduction of the use of a Theory of Change for in designing UNEP projects. In its place is a traditional logframe with indicators and associated targets. These indicators along with the key deliverables and benchmarks/milestones included in Appendix 6 of the ProDoc were to be the main tools for tracking project implementation progress and whether project results had been achieved. Milestones set out as mid-term and end of project targets in the logframe and lists of key deliverables and benchmarks in Appendix 5 and 6 of the ProDoc have been adequate for tracking of delivery of project outputs but not sufficient to foster monitoring towards progress of outcomes and higher level objectives.

425. The logframe and causal logic and the logframe that summarizes it have a number of weaknesses. The original logframe was overly complex, with many indicators that are not fully SMART and some not directly relevant to the outcome they are intended to track. For instance, the main indicator for the project objective as it was initially formulated – '*Reduced threats to globally important BD through established sustainable use practices and cooperation agreements at various scales in four pilot projects in five countries*' - partly repeats the objective itself, does not relate directly to the uptake of '*the findings and tools of ecosystem service assessments in policy and decision making*' resulting from the Project, and '*sustainable use practices and cooperation agreements'* are not specified. Other indicators have only a weak link to the outcomes they seek to track, e.g. '# of international processes acknowledging the contribution of ProEcoServ' does not necessarily indicate the Outcome 3.1 '*Increased policy relevance of ecosystem services sciences' results in international BD and ES-related processes*' (rather it indicates success in promoting the project).

426. There was no project monitoring of GIB or relevant indicators in the logframe. The opinion of one of the UNEP TMs was that the GEF Tracking Tools should be used to track the GIB, but these are not integrated into the project's logframe and are generic GEF BD indicators, not specific to the project. It is also recognized that the GEF Tracking Tools have significant limitations for showing changes in GIB, especially for mainstreaming projects due to the criteria measured.

427. Given that the aim of the project was to mainstream ES approaches and tools into decision-making across a wide range of sectors, it is disappointing that there were no socio-economic indicators that would be of relevance to the economics or development communities. UNEP needs to consider a broader list of indicators in future ES projects that are more directly relevant to economic and development policy (as well as biodiversity), such as jobs created, improved incomes and income distribution, contribution to GDP, if it wishes better uptake by ministries in the non-environment sector, such as finance, industry, business, etc, as well as considering indicators which could capture the costs from degraded ES if they are not managed sustainably (such as replacement costs of water supply avoided if ES restored, cost benefit analysis of reduction in agricultural production from ES degradation, etc.

The M&E design is rated as Moderately Satisfactory.

M&E plan implementation and reporting

Reporting

428. Organisational arrangements and responsibility for project level progress monitoring are specified in project documents. The PSC and national or local steering committees were to both play a role in M&E activities (particularly the PSC), but apart from some members reviewing reports, they did not contribute significantly according to interviewees.

429. Reporting requirements were largely fulfilled throughout the Project, with quarterly expenditure reports and cash advance requests, 6-monthly progress reports and Project Implementation Reviews (PIRs) submitted largely as planned. The information provided by the M&E was used by the PMU to improve project delivery and to adapt to changing needs.

430. There was generally good level of reporting on activities and outputs in project reports, but reporting on achievement of outcomes and project objective less so, again largely due to the lack of appropriate indicators. Reporting was found to be largely accurate although there was a degree of 'positive spin' in some reports, especially in the final Synthesis Report, and for Chile where there have been fewer successes than reported, e.g. adoption of models at SPA has not occurred.

431. The quality of the PIR reports varied and often entries did not relate to the question asked. There were also mistakes in the English, e.g. 'intake' rather than the correct word of 'input', which caused confusion over the intended meaning of some sentences (it is suggested that UNEP ensures it has the option of employing someone fluent in English to review the final drafts of their publications and PIRs in future if it is needed). The overall success of the project in the PIR for 2015 was perhaps overrated, e.g. for Chile there was no uptake of the two DSS tools by the local authority.

432. The project did not produce a typical formal GEF 'Final Project Report', presenting the main outputs, outcomes and impacts, and sections on replication, sustainability and follow-up, but instead produced a Synthesis Report (see paragraph 231). The TE still believes that an overall final project report would be valuable and should be produced, presenting an overall assessment of not only the achievement of the project's objective and outcomes but a more detailed section on sustainability (which does not come through strongly in the Synthesis Report, a reflection that it was not a focus in the last 12 months of the project), an expanded lessons learned section with an analysis of what did not work as well as what did as this would have be useful from a practical lesson learning point of view, a more detailed discussion of the implications of the project's results for wider policy and practice; and recommendations on how the project's results should be used with next steps (what, where, how, who, how much, etc) set out. The Final Report would also benefit from an annex listing all reports and publications produced by the project over its lifetime.

Lesson learning

433. Project teams have attempted to capture lessons on how to develop ES decision support systems and tools, raise awareness of the value of ES and mainstream these into policy and decision-making process. While many important lessons have been identified at the local, national and (lesser extent) global levels, which are mostly reflected in the final national reports, the results have been mixed. The teams in South Africa and Trinidad and Tobago have produced some good, clear lessons, but they are weakly identified in the reports from Chile and Vietnam. ProEcoServ-SA's report gives a particularly comprehensive and detailed analysis of the lessons learned of the project's experience of mainstreaming ES approaches and management into decision-making in South Africa. However, the team felt that the framework for their national report, prescribed by the ESE Unit in Nairobi, did not allow them to do justice to the results from South Africa. Therefore, they also produced their own, separate report that has a much more focused but expanded presentation on their experiences of mainstreaming ES into policy and decision-making during

the project's lifetime and the development process for the key decision-support tools[133] which very useful information on some of the approaches employed and good detail on results. This document is a more in-depth but accessible read than the project's Synthesis Report and should be promoted more widely by the UNEP ESE Unit. Other countries could also perhaps undertake a similar structured analysis.

434. Reporting of lessons learned at the global level has been mixed and rather confused. There is poor capturing of lessons learned in the PIR (even that for 2015), and the Synthesis Report contains little on the global level activities undertaken by ProEcoServ (under Component 3).

435. In the TE's view, there is a case for a better synthesis of the lessons learned across the project on how to effectively promote and mainstream ES into development policy and planning, using results from the individual countries (which the four countries were expecting to undertake at the September 2015 meeting – see paragraph 229). However, while several interviewees suggested that they would like to see such an event, there were mixed views about holding another expensive international meeting, and many expressed the view that it was already over a year since they had completed their input to ProEcoServ and they had moved on to other projects. An alternative option would be to employ a consultant to analyse the findings and lessons learned in relation to how to operationalize the valuation, promotion and mainstreaming of ESs – some of the challenges and solutions, captured in the form of a short briefing paper aimed at policy makers (not a book of many chapters), and presented at the global level, e.g. to IPBES.

Evaluations

436. A Midterm Evaluation was carried out in mid-2013. The consultant visited three of the pilot countries (Chile, Trinidad and Tobago, and Vietnam), as well as interviewing the UNEP team and staff at UNEP HQ in Nairobi and her initial findings were presented at the global PSC meeting held in 2013 in SPA, Chile. The MTE was considered very helpful, and was instrumental in narrowing down the project and enable the national teams to focus on a more deliverable, less ambitious set of activities.

437. However, there were major problems in organizing and delivering the TE, which adversely affected its efficiency and effectiveness, and which UNEP and UNON (who provide the administrative assistance to the UNEP Evaluation Office) need to address as a matter of urgency.

438. Both MTE and TE were budgeted for and included in the project workplan. However, the overall budget (clearly a 'guestimate') was not sufficient for such a large, complex project, especially given the geographic spread of the four target countries and a global element of the project based in Nairobi, Kenya. This was recognised while planning for the MTE so US$17,000 was transferred from the TE budget line to the MTE budget to allow the MTE consultant to visit three of the four countries, attend a global PSC and interview key UNEP staff in Nairobi. However, the funds taken from the TE were not replaced, consequently the working budget for the TE when planning started was too small to allow any effective evaluation to be designed. The consultant and EO staff spent many weeks trying to design a workable scene but failed. In the end, after weeks of wasted effort, additional 'top up' funds were found from within UNEP (which took time to access) to allow the TE consultant to visit two of the four countries and UNEP HQ in Nairobi[134]. This was one of the reasons why it was not possible for the TE to visit South Africa and directly interview project participants face-to-face or to visit Vietnam, which would have been particularly useful given the difficulties of accessing provincial and site level project participants by Skype and language issues.

[133] Reyers, B., Nel. J.L., Sitas, N., O'Farrell, P., Maze, K., Driver, A., Cummings, T., Ginsburg, A., Pringle, K. 2015. Mainstreaming Ecosystem Services into Policy and Decision Making from National to Local Scales: Experiences from South Africa. Council for Scientific and Industrial Research, Stellenbosch. Also see Sitas, N., Prozesky, H. E., Esler, K. J., & Reyers, B. 2014. Opportunities and challenges for mainstreaming ecosystem services in development planning: perspectives from a landscape level. Landscape Ecology 29:1315–1331

[134] The total amount of funding identified at the design stage for both the MTE and TE combined was only USD50,000. This represents only 0.79% of the GEF total, which is extremely low, especially for a project with such a geographical spread of countries, and illustrates that the evaluations were not seriously considered by the project design team or UNEP at the PPG stage. Apart form anything else, the figure of USD50,000 is clearly an arbitrary figure not based on any real world calculation of how much it costs to carry out two large evaluations, across four countries with a global component.

439. Apart from a inadequate budget, there were very long delays over contracting and arranging international travel and participation of national partners due to several reasons including: a lack of understanding of responsibilities over who should provide support to the TE and in what form among the project management team (global and in some countries); staffing issues at the UNEP EO in Nairobi (lack of cover when line managers were not available) with misunderstandings over responsibilities for arranging the evaluation and, particularly, UNEP's adoption of Umoja that led to repeated administrative delays and uncertainty over the amount of funds within the project budget due to misallocation of funds within Umoja. These problems delayed the start of the TE, which was originally scheduled to begin in August 2015, to December 2015 and delayed traveling to Trinidad and Tobago, Kenya and Chile to 2016, and the issues had a knock-on effect for the duration of the TE. They also negatively affected the willingness of some interviewees to be involved with the TE due to the frequent changes in travel arrangements and rescheduling of interviews, (who were understandably reluctant to keep setting new dates when travel authorization kept being delayed), and have led to reputational damage to UNEP among some of the partner countries. The small financial resources available from the central budget (there were no specific national level budgets for participation in the evaluation) limited the ability and willingness of some countries to participate in the TE, and some of those individuals who were involved had to cover their costs from their own funds (which the TE consultant considers this unacceptable). Finally, the scheduling meant that some interviews took place well over a year after the person being interviewed had had any involvement with the project so they couldn't recall details, which is another argument for holding the TE before closure of the project. UNEP and UNON need to address the above issues as a matter of urgency.

Recommendation 8. *It is recommended UNEP-GEF Terminal Evaluations take place 3-6 months before the operational closure of a project (not afterwards), so that project staff and partners are still available for interviews, and there is the opportunity to make recommendations that can still be implemented. This timing should be written into the project's work plan. Arrangements for the evaluation should be discussed (draft ToR agreed) and the budget identified and approved at the penultimate PSC for the project, and the funds 'ring-fenced' so that projects/UNEP cannot reallocate the funds to other project activities. The evaluation budget needs to be more accurately calculated at the design phase (realistic, not an arbitrary number, e.g. US$ 10,000), and reviewed and approved at the final PSC meeting before the TE and include sufficient funds for partners to be involved (cover their costs – they should not be expected to self-fund). The roles of all concerned – project manager, UNEP Task Manager, evaluation office staff, and project teams – need to be clearly defined, preferably at the design stage (as part of the M&E annex of the ProDoc) and through staff and consultant ToRs and PCAs for partners, to avoid misunderstandings and ensure that evaluation teams have the on-the-ground support they need. The role of the project manager and his team needs to be particularly clear (e.g. to actively aid setting up of meetings, organise local travel arrangements and interviews as required, ensure there is sufficient in-country budget for the interviewees to participate, etc), and there should be a clear requirement of partners to provide on-the-ground support for evaluation teams which should be clearly explained in PCAs. UNEP and UNON need to be able to offer evaluation consultants greater flexibility in planning missions with the option of self-ticketing for flights, and planning time to set up evaluations (pre-missions) must be included in evaluation consultant contracts (it is currently not considered). Finally, given the difficulties of operating under the new Umoja system, the UNEP EO needs to ensure that EO staff are available to facilitate contracting, development of terms of reference, field missions, of consultants, during the evaluation planning period to avoid unnecessary delays).* ***Responsibility****: UNEP Evaluation Office, UNON, UNEP GEF Coordination Office, GEF Task Managers.* ***Timeframe****: Introduce new arrangements by end 2016.*

The M&E plan implementation is rated as Moderately Satisfactory (lowered due to delays and difficulties in organising the TE)

4 CONCLUSIONS, RECOMMENDATIONS & LESSONS LEARNED

4.1 Conclusions

440. The project objective was to '*reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making*'. The project aimed to develop capacities of decision makers, users and beneficiaries of ecosystem services through promotion of a set of ecosystem management tools and approaches within sectoral planning frameworks and macroeconomic planning models to assess trade-offs and development choices that could help strengthen biodiversity and ecosystem resilience at a range of scales. In this the project has had some considerable success, although it has been mixed, partly because of the over-ambition of the project design relative to its limited resources. There has been most success at the national level, particularly in South Africa, although some in very interesting and instructive lessons have also come from the project's activities at the local level, such as at Eden in South Africa and San Pedro de Atacama in Chile. However, uptake and impact at the global level has been limited, and overall the project did not achieve its potential.

1. To what extent has the project contributed to the reduction of threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision-making? What is the likely expected impact of the project in this context?

441. The project has not assessed or measured changes to threats to Globally Important Biodiversity (GIB, no indicator in the logframe) and indeed the project is not addressing this directly. Rather this is an expected longer-term impact of the project activities which have focused on the means to achieve this – uptake and use of the findings and tools of ecosystem service assessments in policy and decision-making. However, there are some indications that the project may produce some positive outcomes for both biodiversity and ES provision with direct benefits to the well-being of human communities, at least at the local level, in the medium to longer term. In terms of globally important biodiversity ProEcoServ's work at Ca Mau in Vietnam will hopefully lead to a reduction (and possible reversal) in clearance of mangroves of this Ramsar-designated wetland (see paragraph 278), and separately, the various national-level policies successfully targeted by the project should also lead to biodiversity and ES benefits in the longer term. In South Africa, promotion of programmes to clear non-native invasive plants to secure water and manage fire risk in priority areas and new watershed protection investments to help restore ecosystems and water services should benefit the native biodiversity (although value for globally important biodiversity is unclear as there are few red-listed species in target areas directly affected). In Trinidad and Tobago, the incorporation of the mapping and valuation data into the land use planning system, particularly related to forest cover in Trinidad's Northern Range, will hopefully help encourage forest restoration thus improving biodiversity value, and in Chile, if the two DSSs for water and tourism management can be integrated into local policy and planning structures at SPA (see paragraph 307), then this is likely to lead to reduced threats to the local biodiversity and ES of the surrounding Salar de Atacama region.

2. To what extent has the project contributed to the integration of ecosystems assessment, scenario development and economic valuation of ecosystem services into national sustainable development planning

442. The project has had made a significant contribution to the mainstreaming of ES assessment and valuation into sustainable development planning, particularly in relation to water resource management and disaster risk management in South Africa (see paragraph 258 and subsequent paragraphs), and land use planning in Trinidad and Tobago (see paragraph 262). In Vietnam, ProEcoServ was instrumental in mainstreaming the ES approach in the national Green Growth Strategy, which is particularly important as it provides a framework for other sectors (see paragraph 265). ProEcoServ's focus in Chile has been at the local rather than national level. Although scenario development has been used as a tool in all four countries its uptake has been mixed, with limited interest in Chile. The project as a whole has produced some good

tools and approaches applicable across a range of ecosystems (from coastal mangrove to montane desert ecosystems) and institutional arrangements, although these could be better promoted by UNEP (in a form other than the Synthesis Report).

3. To what extent has the project supported the strengthening of capacities and technical advisory services that will allow analysis of how policy decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors?

443. ProEcoServ has also made a significant contribution to increasing the range and availability of technical capacity available to target countries, through generating new knowledge and introducing and piloting appropriate tools, combined with a substantial amount of training of key technical staff (largely through workshops) that should help improve decision-making with respect to policy and planning decisions (see paragraph 237 onwards). Capacity building appears to have been strongest in South Africa. However, in some cases there remain capacity constraints, with, for instance, no senior economist on Trinidad and Tobago who has been engaged with the project, and Vietnam also still heavily reliant on outside consultants for economic valuation work. In addition, possibly with the exception of South Africa, additional training and capacity support will be needed to support continued use of the DSS tools by the relevant agencies, and in Chile, it could be argued that capacity has been reduced recently in the sense that there will need to be repeat training to enable local stakeholders to utilise the DSS tools once agreement is reached on their ownership.

4. To what extent has the project increased the policy relevance of ecosystem services sciences' results in international BD and ES-related processes?

444. It is clear that the ProEcoServ has helped to raise the profile and perceived relevance of ES approaches and closed the divide between science and policy in national development processes – evidenced by increased uptake of ES approaches within national policy and examples of improved investment in ecosystem based management that can be attributed to ProEcoServ (see paragraph 268). However, there is much less direct evidence at the international level and most of the bodies and initiatives targeted at the international level have already adopted an ecosystem approach, e.g. IPBES, CBD, TEEB, to a greater or lesser extent (in other words, the project has been 'preaching to the converted' to some extent). However, no country has had significant engagement with the more powerful ministries that influence the development sector, namely finance, industry and business, although there have been some successes with those dealing with investment (in Vietnam) and planning (Trinidad and Tobago).

5. To what extent has the project implemented the recommendations of the MTE? How effective were the revisions in the logframe to adjust the focus of the project and to guide management decisions?

445. The MTE was largely viewed by project personnel as very useful for them to deliver a more targeted, realistic project (which was initially too ambitious and difficult to understand with too many activities and outputs). Consequently, most of the MTE recommendations were followed. The revised activities sets and logframe certainly helped countries focus their delivery better during the second half of the project. However, one set of recommendations concerning further activities relating to NCA was largely ignored. For instance, the MTE cautioned against continued effort and resources being allocated for this element and that if it was included made several recommendations including a revision of the logframe, to include targets and indicators on green accounting, so that progress could be monitored, countries adequately resourced to undertake the work, and the activity appropriately assessed in the TE of the project. However, this was not addressed and those countries interested in green accounts (Trinidad and Tobago and Vietnam) increased their efforts.

6. Did the project take advantage of most recent best practices in ecosystem services?

446. There are no comparative studies that rate 'best practice in ecosystem services' (at least the project designers did not review these), and indeed, the project itself was expected to 'develop best

practice'. Although most of the approaches and tools, e.g. InVEST being promoted by the project in Chile, Trinidad and Tobago and Vietnam, such as ecosystem services mapping were new to those countries or to the target institutions, they have been employed and developed in other countries. However, it can be said that their adaptation to the local circumstances and the lessons learned from these exercises – what worked, what didn't – can be considered a valuable for others, and certainly some important lessons have been captured about particularly effective means, such the co-production of knowledge process used with stakeholders to generate real ownership of the process and results in South Africa and Chile. The most innovative tool developed was probably the modification of *Tableau* software at SPA in Chile.

6. What were the strengths, weaknesses, advantages and disadvantages of the project's execution and oversight arrangements, given both the implementing and executing bodies were housed within the same UNEP Division? Did this arrangement create any conflicts or issues with delivery? Was the separation between the implementing and executing groups sufficient? How should internally executed projects be managed by UNEP in future?

447. The internal execution arrangement adopted for the delivery of the project by UNEP, with both IA and EA housed within DEPI and ultimately reporting to the same Division Director, has caused some concern both within and outside UNEP. On the one hand, it meant that project communication and administration were facilitated allowing smoother running of the project, but on the other hand it did raise the potential for conflict of interest given the IA had responsibility for oversight of the EA through the possibility of internal UNEP 'politics' and considerations interfering with management decisions on the project. There was a further complication in that the original Project manager later became the Task manager for the project so switched from the EA to the IA role. There was evidence that this had happened on occasion, notably in relation to the continuation of activities relating to NCA in Trinidad and Tobago following the MTE (although the TE heard very different views on this). In the evaluation's opinion the separation between the IA and EA groups was not sufficient and UNEP should have ensured that the Project Manager and Task Manager should have ultimately reported to different Division Directors. The TE understands that there are now clear guidelines on the oversight arrangements for internally managed GEF projects that recognise the need for separation of EA and IA, so this situation is not likely to reoccur.

448. The overall rating for the Project is **Satisfactory**. A summary of the evaluation criteria, assessment and ratings is given below.

Table 8: Summary of the evaluation criteria

Criterion	Summary Assessment	Ref	Rating
A. Strategic relevance	The project contributed to the GEF Focal Areas, and the project fits well with UNEP's mandate and MTS for 2010-2013. The project was designed based on clear national priorities and has a good alignment with national government and other national and local stakeholder priorities and interests. Indeed, stakeholders considered the project is considered to have become more relevant as it has progressed.	3.1	HS
B. Achievement of outputs	Most outputs were delivered and generally delivered well, with some excellent results from South Africa and Vietnam (national level, provincial level difficult to assess), good delivery and important results from Trinidad and Tobago especially considering capacity constraints, and Chile did well to deliver two DDS tools following the short time after the MTE, although there are issues with their sustainability. Delivery of global level outputs was more mixed. The project has also produced a substantial body of scientific and economic data on ES.	3.2	S

Criterion	Summary Assessment	Ref	Rating
C. Effectiveness: Attainment of objectives and planned results	The project has delivered many outputs but assessing progress on achievement of outcomes and higher aims is more problematic.	3.3	S
1. Achievement of direct outcomes as defined in the reconstructed TOC	Technical capacity (tools, systems, information, new networks, trained staff) available to decision- and policy-makers to analyse how policy and management decisions impact ecosystem services has certainly been increased. There has also been an increase in awareness and understanding among targeted stakeholders of ES and their value, with increased involvement of stakeholders in decision-making processes.	3.3.1	S
2. Likelihood of impact using ROtI approach	There have been some good examples of integration of ecosystem services approaches, tools, systems and knowledge into policy, legal and planning frameworks in all countries, although less successful in Chile, with examples of increased investment (both public and private investment) in ES approaches to support provision of ES, especially in South Africa, and ProEcoServ has helped to raise the profile and perceived relevance of ecosystem services approaches in national and (less so) international development processes. No immediate (measured) reduction in threats to biodiversity but possible longer term.	3.3.2	ML
3. Achievement of formal project objectives as presented in the Project Document.	It is difficult to assess the degree of attainment of the project objectives due to lack of appropriate indicators, baselines and targets, e.g. no direct measurement of threats to biodiversity through the ProEcoServ project. However, some degree of attainment of objective level indicators.	3.3.3	MS
D. Sustainability and replication			ML
1. Socio-political sustainability	There are doubts about aspects of socio-political sustainability of some of the project's results with the level of ownership among key stakeholders and targeted users of the project's tools and other results mixed. Likelihood of sustainability is considered lowest in Chile, where there was no formal agreement on the handover of the two DSS tools (tourism and water) at the end of the project. Sustainability of results in South Africa very good, with sustainability considered early on, and good level of ownership in Trinidad and Tobago and high at national level in Vietnam.	3.4.1	ML
2. Financial resources	Follow up (additional) funding needed for Chile, and is a possibility for Trinidad and Tobago for the PES proposal if it can be developed to the point it can be submitted to the Green Fund. Not considered an issue in South Africa as results effectively mainstreamed.	3.4.2	ML
3. Institutional framework	Key partners well-established and stable but some of the targets for ProEcoServ work still lack sufficient capacity such as Central Statistics Office in Trinidad and Tobago. Institutional capacity considered most acute at SPA in Chile Some of the networks created through the project, e.g. in South Africa, should help support sustainability of project results through strengthening institutional sustainability. Changes in government in Chile and Trinidad and Tobago have negatively impacted institutional sustainability and present a risk in all countries.	3.4.3	ML
4. Environmental	No major concerns from project, although there will not be any	3.4.4	ML

Criterion	Summary Assessment	Ref	Rating
sustainability	move towards environmental sustainability at SPA in Chile unless the two DSS tools and associated data collection schemes are adopted and operational. Climate change impacts were not considered an important element in this project, apart from in South Africa.		
5. Catalytic role and replication	Very good catalysis of results and some direct replication, with new projects catalysed at SPA in Chile, Trinidad and Tobago and Vietnam, with many examples of catalysis in South Africa, especially notable being through insurance sector. Little direct evidence of catalysis at global level. A few examples of direct replication of approaches or tools in South Africa e.g. related to ecological infrastructure and Vietnam with duplication of mapping tool.	3.4.5	HS
E. Efficiency	Although no specific cost- and time-saving measures proposed, the project built on well-established partners with extensive networks and connections with government (less so Chile), largely existing data sets (except Trinidad and Tobago), and tried and tested tools, e.g. InVEST. Proximity of IA and EA and FMOs in Nairobi improved efficiency of project administration and communication. However, significant delays on beginning of project which required two no cost extensions and was approximately 18 months late on delivery.	3.5	MS
F. Factors affecting project performance			
1. Preparation and readiness	Muddled project design and project document with too many elements and activities, which made it difficult to understand. Unfortunately, project partners were 'locked in' to delivery until project was revised at MTE stage. No capacity assessment of partners undertaken at project design stage. Inclusion of some elements which had only low ownership by participating countries, and which were not in the project document, notably NCA.	3.6.1	MS
2. Project implementation and management	Management and execution arrangements were generally clear. Project executed internally with IA and EA within UNEP. Project communication and coordination in Chile and Vietnam were challenges due to distance from executing partner base, but post-MTE strategy by Chile to locate a team at SPA made huge difference. Low budgets for project management were a problem for most countries, particularly Trinidad and Tobago which required co-financing. Use of PhD students in Trinidad and Tobago to fill technical capacity gap had mixed success. High turnover of personnel at UNEP HQ did not help. There was also some criticism of the role and value of UNEP as an Executing Agency for this project.	3.6.2	MS
3. Stakeholders participation, cooperation and partnerships	Good engagement of partners and stakeholders, although engagement with private sector and non-environment ministries, e.g. economics, finance rather limited. Very good local partnerships developed in Trinidad and Tobago and Chile, in case of the latter where project helped reduce conflict by bringing people together in a neutral space. Mixed success of linkage with other relevant projects at global level, and surprisingly poor within UNEP.	3.6.3	S
4. Communication and public awareness	The project's communication and public awareness raising activities were considered reasonably effective; the level of knowledge of the value of ES and decision-making systems has	3.6.4	S

Criterion	Summary Assessment	Ref	Rating
	increased. Some particularly good products from South Africa with 'ecological infrastructure' message having traction among groups not usually targeted by conservationists. Careful, targeted use of ES maps and statistics developed or employed by the project had particularly powerful impacts. Translating the technical language of ecosystem services was an important aspect of the work in Chile and South Africa particularly which generated some important experiences and lessons.		
5. Country ownership and driven-ness	Project built on nationally and locally identified priorities/follow-up to the MA/SGAs and fitted well with national priorities and plans, although some elements of the project included at the design phase did not come from the national partners. Focus on co-production processes, notably in South Africa and Chile, helped to build ownership.	3.6.5	MS
6. Financial planning and management	Detailed budget presented in usual form as an appendix in the ProDoc. The actual project costs were very close to the expected both by component and by country. Substantial co-financing but a single source from Trinidad and Tobago dominates. Additional substantial leverage funds from Trinidad and Tobago and Vietnam. The single biggest problem relating to financial management has been the long delays on payments to partners, largely due to the introduction of a new UN IT-based administration and management system (Umoja) in 2015.	3.6.6	S
7. Supervision, guidance and technical backstopping	The project was managed by a series of TMs and PMs, based in Nairobi. A global PSC as well as national (and in Chile's case a local) steering committees were established, with identified budgets. These were mostly useful as routes for information dissemination, and although there was active engagement by members during the PSC meetings there was little contact between these.	3.6.7	MS
8. Monitoring and evaluation	The project's M&E system followed UNEP's standard monitoring and evaluation procedure.	3.6.8	MS
i. M&E design	Project suffered from a weak design, e.g. many non-SMART indicators, with no indicator for globally important biodiversity and no socio-economic indicators that would be of relevance to the economics or development communities.		MS
ii. M&E plan implementation	Reporting requirements were largely fulfilled throughout the project. Good level of reporting on activities and outputs in project reports, but reporting on achievement of outcomes and project objective less so. Limited Synthesis Report chosen to present final project results, rather than final project report. Some good lessons captured by individual countries but project would benefit from a separate more intensive and group lesson-learning exercise to draw out common lessons learned. MTE took place although was delayed by 17 months. Very serious issues with the budget and organization of the TE by UNEP/UNON, which was delayed and created significant problems in terms of arranging interviews and field missions.		MS[135]
Overall project rating	**Satisfactory**		**S**

[135] The UNEP EO acknowledges the feedback regarding delays during the MTE and TE. At the same time EO would also like to note that the project cannot be held accountable for all the factors that caused delays in the evaluation processes. Nevertheless, considering other M&E related aspects presented in this report, the MS rating remains.

4.2 Recommendations and Lessons

449. The recommendations that have been generated from the evaluation findings:

	Recommendation #1
Context:	ProEcoServ-TT were unable to develop and submit a proposal for a PES scheme in the Caura valley of Trinidad's Northern Range to the Green Fund. However, there is still considerable interest (and need) from the Fund to finance such a scheme, and continuing interest in the community.
Recommendation:	It is recommended that the ProEcoServ-TT fully develop a project proposal to be submitted to the Green Fund for consideration for funding for a PES scheme in the Caura Valley. This will need additional support to collect the necessary socio-economic data to complete the application. There are likely to be costs associated with this, principally the hiring of a consultant to pull together the proposal, which should be met from the remaining GEF funds held by UNEP Nairobi.
Responsibility:	Caura Valley Village Council, ProEcoServ-TT team/UWI, in collaboration with Trinidad and Tobago's Green Fund and the UNEP ESE Unit in Nairobi
Time-frame:	Before end of March 2017.

	Recommendation #2
Context:	Integration of ProEcoServ results into international processes has been weak but could be improved if there was a better understanding of the 'entry points' and requirements to access these and a more coherent approach to mainstreaming at the global level, which was not clearly detailed at the project design stage (under Component 3). Related to this there has been little linkage between the project and many other UNEP projects with a focus on ecosystem services, and limited sharing of experiences and lessons learned despite obvious opportunities for the project and other individual projects to benefit.
Recommendation:	As part of this, it is recommended that a scoping paper is produced that maps out relevant international bodies, processes and initiatives (including other UNEP and UN-funded projects and initiatives, including UNDP Country Programme Document processes) operating in arena of BD and ecosystem services for mainstreaming project results, in order to improve the uptake and mainstreaming of project (and other ecosystem service related project) results at the global level, especially the target economic tools Included in this work should be a brief analysis of how the ProEcoServ results relate to the recently agreed SDGs in each country and their international obligations, and UNEP's work on the SDGs. Also as part of this it is suggested that a review meeting of all ecosystem services focused projects in UNEP's portfolio (both GEF and non-GEF funded) projects that have been delivered in the last 5 years, e.g. ProEcoServ, Uganda PES, Bulgaria-Romania PES, etc, is held to draw out common experiences, good practices and practical lessons learns on how to value, promote and mainstream ES into national and local level decision-making, to identify what worked and why and (as important), what did not and why. This should result in a specific publication. The meeting should focus on the project teams rather than inviting 'global experts' not directed involved with the GEF projects. This recommendation will require additional funding, which needs to come directly from UNEP; it should not be treated as a priority for funding using the remaining GEF funds (other recommendations are more pressing, as indicated).
Responsibility:	DEPI, DELC, Subprogramme Coordinators from the EMSP, CCSP and DCSP but led by the UNEP ESE Unit in Nairobi, other relevant units in DEPI, UNEP GEF Coordination Office, GEF Task Managers, as well as project teams (mostly individual project managers), and coordinated by the EMSP Coordinator at UNEP
Time-frame:	Before end of June 2017.

	Recommendation #3

Context:	Sustainability of project results after closure of the project was not given sufficient consideration by most project teams or at the global level.
Recommendation:	It is recommended that UNEP-GEF projects begin discussions of sustainability of project results and develop an exit strategy some 12-18 months before the operational end of a project and with a new partnership strategy, not leave these to the last few months (or after the project has been closed operationally). Agreement and responsibility for this should be built into the PCAs with executing agencies and reported on at the PSC meeting closest to last the 12 months before closure of a GEF project. It is also suggested that the design and implementation of activities to facilitate sustainability should be part of the project design template, and an area to be especially considered by UNEP's Project Review Committee. Written guidance on addressing sustainability should be developed by the UNEP GEF unit for distribution to project teams.
Responsibility:	UNEP GEF Unit and UNEP divisional staff involved with GEF projects in Nairobi, EMSP and CCSP Coordinators, UNEP PRC, and future executing partners for UNEP GEF projects.
Time-frame:	Future GEF projects.

	Recommendation #4
Context:	Ownership of the two DSS tools (water, tourism) developed at SPA still rests with CEAZA and not with the local community, and the tools have yet to be properly deployed and capacity and agreements to be able to use them effectively developed. Also, monitoring systems to collect relevant water and tourism data to feed into these tools have not been fully established. There was not enough time to ensure ownership as there had been major changes to the management of the project around the MTE point with a local team installed at SPA. This meant that much of the project had to be delivered in only 2 years.
Recommendation:	It is recommended that a proposal is developed to transfer ownership of the two DSS tools to local stakeholders (with clear identification of the steps in the process – what, how, who, when, where, with what resources, etc) and sufficient local capacity built to ensure their operation for at least 18 months (until they are fully integrated into local systems and sustainable funding can be found). The proposal should consider the recent draft proposal for the establishment of data collection/monitoring systems for tourism and water. It is recommended that the process is led by the CPA and hosted by the office of the Mayor of SPA. Additional input from CEAZA to help develop sufficient local capacity building to enable the community to use the tools will be required. This recommendation should be treated as a priority for funding using any remaining funds from the GEF grant, e.g. for meetings, development of the proposal, and training in the use of the tools to members of the community who are not proficient.
Responsibility:	CEAZA (La Serena), Project Manager SPA, Mayor's office and municipal authority, CPA, Fundacion de Cultura y Tourismo local office of SERNATUR, private sector travel groups, CONAF, and regional DGA and MoE offices in Antofagasta, and UNEP Nairobi.
Time-frame:	Before end of April 2017.

	Recommendation #5
Context:	The project teams struggled with very large sets of activities and deliverables which meant that some were not delivered to the extent originally envisaged.
Recommendation:	It is recommended that large, complex, multi-country UNEP-GEF projects are designed with just a few key deliverables and activities that would have high impact (and be achievable) rather than trying to deliver a large numbers of activities. In addition, project design teams should be encouraged to detail to the outcome level (no more than 3-4 outcomes) with outputs and activities treated as more indicative at the PPG stage and then reviewed and developed at the inception stage (within the constraints of the GEF budget and rules and dependent upon approval by the Project Steering Committee (PSC) so that the project starts implementation with a set of relevant, realistic activities that will better deliver on the intended higher-level project results. To reflect this, indicators

	and targets should be only presented for the objective and outcome levels in the logframe, and not at output level (these are achieved or not so can be monitored simply). This would improve flexibility of the GEF approach and allow for the constraints of the short PPG phase, and mean projects were not 'locked in' to carrying out costly time-consuming activities of limited relevance until the MTE. In addition, given the need for flexibility, especially for mainstreaming projects, UNEP should consider including an unallocated 'contingency' line (suggested 10-15%) in the original project budget that allows for change at the MTE stage if required.
Responsibility:	UNEP-GEF Task Managers, UNEP GEF Unit, UNEP Project Review Committee.
Time-frame:	Future UNEP GEF projects

	Recommendation #6
Context:	Some of the partners, notably Trinidad and Tobago and Vietnam, found it a challenge to deliver project activities due to low capacity initially. This was not assessed during the project's design phase; it was simply assumed that executing bodies would have sufficient capacity.
Recommendation:	It is recommended that UNEP undertake a formal assessment of the capacity of executing partners during the project design (Project Preparation Grant - PPG) stage. This should be reviewed as mandatory and included as part of the internal UNEP PRC review, in order to ensure that there is sufficient capacity to carry out the project (not just assume executing bodies have it), especially for large multi-country projects. A formal capacity assessment sheet should be designed (modified according to the project needs) and built into the PPG process (attached as an annex to the main ProDoc).
Responsibility:	UNEP-GEF Task Managers, UNEP GEF Unit, UNEP Project Review Committee
Time-frame:	Future UNEP GEF projects

	Recommendation #7
Context:	Although many projects and initiatives were identified for linkage with ProEcoServ (including long list in the ProDoc), relatively little collaboration was made with most and other than personal motivation there are few incentives for the UNEP managers project managers to do so.
Recommendation:	It is recommended that (where relevant) a specific activity set with dedicated budget lines and performance indicators and targets that seeks to establish collaborative partnerships and linked activities with other relevant projects (especially mainstreaming projects) both within and outside of UNEP is included in future UNEP-GEF projects. This activity list needs to be written into the work plan at the design stage.
Responsibility:	ESEU, other relevant units in DEPI, UNEP GEF Coordination Office, GEF Task Managers and individual project managers, and coordinated by the EMSP Coordinator at UNEP
Time-frame:	Future GEF projects at design and early implementation phases.

	Recommendation #8
Context:	There were considerable challenges in organising the Terminal Evaluation that caused significant delays and made for a very inefficient evaluation due to a number of reasons, most internal to UNEP and UNON.
Recommendation:	It is recommended UNEP-GEF Terminal Evaluations take place 3-6 months before the operational closure of a project (not afterwards), so that project staff and partners are still available for interviews, and there is the opportunity to make recommendations that can still be implemented. This timing should be written into the project's work plan. Arrangements for the evaluation should be discussed (draft ToR agreed) and the budget identified and approved at the penultimate PSC for the project, and the funds 'ring-fenced' so that projects/UNEP cannot reallocate the funds to other project activities. The evaluation budget needs to be more accurately calculated at the design phase (realistic, not an arbitrary number, e.g.US$ 1,000), and reviewed and approved at the final PSC

	meeting before the TE and include sufficient funds for partners to be involved (cover their costs – they should not be expected to self-fund). The roles of all concerned – project manager, UNEP Task Manager, evaluation office staff, and project teams – need to be clearly defined, preferably at the design stage (as part of the M&E annex of the ProDoc) and through staff and consultant ToRs and PCAs for partners, to avoid misunderstandings and ensure that evaluation teams have the on-the-ground support they need. The role of the project manager and his team needs to be particularly clear (e.g. to actively aid setting up of meetings, organise local travel arrangements and interviews as required, ensure there is sufficient in-country budget for the interviewees to participate, etc), and there should be a clear requirement of partners to provide on-the-ground support for evaluation teams which should be clearly explained in PCAs. UNEP and UNON need to be able to offer evaluation consultants greater flexibility in planning missions with the option of self-ticketing for flights, and planning time to set up evaluations (pre-missions) must be included in evaluation consultant contracts (it is currently not considered). Finally, given the difficulties of operating under the new Umoja system, the UNEP EO needs to ensure that EO staff is available to facilitate contracting, development of terms of reference, field missions, of consultants, during the evaluation planning period to avoid unnecessary delays.
Responsibility:	UNEP Evaluation Office, UNON, UNEP GEF Coordination Office, GEF Task Managers.
Time-frame:	Introduce new arrangements by end 2016.

450. ProEcoServ has produced many lessons, mostly captured in national reports and the overall Synthesis Report. These are not repeated here (refer to the references in Annex 10). The following is a summary of the main lessons that came out most strongly from the Terminal Evaluation interviews and analysis of the project's successes and challenges in relation to the way that UNEP-GEF projects are designed and delivered.

	Lesson # 1
Finding:	The ProEcoServ-SA team had significant success with their work at Eden District focusing on addressing the use of ecosystem-based management to address disaster risk (mostly from drought, wild fire, storms, floods).
Lesson:	The use of the concept of 'risk' can be very effective in helping to bring together a diverse range of stakeholders who would not normally collaborate, including, for instance, in SA, the insurance industry, government authorities, researchers and those concerned with disaster risk management, to understand the value of incorporating ecosystem based management strategies into decision making, and co-design response strategies to enhance the resilience of ecosystems to natural hazards.
Application:	UNEP and GEF design and implementation teams

	Lesson # 2
Finding:	The ProEcoServ-SA team chose to focus on the concept of ecological infrastructure which found traction in two major national development planning processes - national development planning and national water resource management.
Lesson:	The use of the concept of 'ecological infrastructure' can be very effective in promoting ecosystem service approaches to stakeholders involved in infrastructure and development planning, In South Africa, for instance, they aligned strongly with national development goals, and the emphasis on labour-intensive ecosystem management resonated with national goals of job creation and poverty alleviation. These 'non-financial' values of ecosystem services need to be stressed more by UNEP.
Application:	UNEP ESE Unit and GEF project design teams concerned with ES

	Lesson # 3
Finding:	A knowledge co-production approach was particularly successful at generating important information and also building relationships at Eden in South Africa and SPA in Chile.
Lesson:	Knowledge co-production can be a powerful collaborative approach that can help create cross-scale perspectives and linkages, and build shared ownership and long-term commitment from stakeholders to a project.
Application:	UNEP project design teams

	Lesson # 4
Finding:	A number of opportunities came up during implementation of the project to promote the uptake of the ecosystem services approaches, assessments and tools, which had not existed during the design phase, e.g. entry points in planning processes. The project would not have been as successful as it had be without the flexibility to respond to (and seek out) these opportunities
Lesson:	It is necessary to take an opportunistic approach to targeting entry points in decision-making processes. Projects seeking to mainstream ecosystem services into decision-making need to be flexible enough to be able to take advantage of opportunities as they arise (which can be unpredictable), leverage personal connections/relationships in order to catalyze discussions with decision-makers, and identify and secure champions to promote uptake of ecosystem services management messages at the highest levels e.g. through Ministers, Permanent Secretaries, or senior Technical Advisors.
Application:	Project teams engaged in mainstreaming

	Lesson # 5
Finding:	The lead in time for preparatory work for mainstreaming, such as establishing relationships with key individuals and institutions, can be significant and government policy and planning cycles often operate over longer time periods that the typical 4-year GEF project.
Lesson:	Multi-country mainstreaming projects should be designed over a longer period than 4 years as lead in times for establishing project management systems (inception periods), collecting necessary data on value of ecosystem services (building the economic argument for ecosystem services) and establishing relationships with key decision makers can be lengthy.
Application:	GEF project design teams concerned with mainstreaming.

	Lesson # 6
Finding:	ProEcoServ-CL chose to install a local team at SPA following a change of management, which enabled much stronger relationships to be built with key stakeholders and was a turning point for project delivery.
Lesson:	Establishing a strong independent project team on the ground at the project site (with an office), who understand local issues, and preferably with at least one member from the local community can enormously improve project stakeholder relationships and improve project delivery, ownership, and ultimately impact and sustainability. This is particularly relevant where the project's executing body is based distant from the field site, where communications can be difficult, and where there are contentious local issues, and given that UNEP does not have national country offices so able to offer in-country support (unlike other GEF IAs).
Application:	GEF project teams

	Lesson # 7
Finding:	The project had good success mainstreaming project messages and results into environment sector agencies, but much less influence and traction with ministries of finance and the private sector. The non-environment sectors/agencies, particularly finance, investment and planning are the key stakeholder groups for mainstreaming of ecosystem services (environmental agencies are already 'converted'). Related to this, the 'language of ecosystem services' still does not resonate with many decision-makers. Experiences from Chile and South Africa in particular showed that communicating the technical detail around ecosystem services (even the phrase 'ecosystem services' itself) can be a challenge and needs to be 'translated' into language and presented in forms that have direct day-to-day relevance and will engage and be understood by the target audience. This is especially true for local communities, but also for non-environment sectors particularly finance and industry (so ES mainstreaming projects can 'speak the language' of economists and development experts).
Lesson:	Project designers and executing bodies need to have better identification at the design stage (certainly by inception stage) of the most important institutions to target for mainstreaming, particularly within government (planning, investment, business, finance and economics), and alliances established with them, as environment ministries and associated national scientific research centres/institutes are generally not the key decision-makers when deciding on national development policy. Along with this there needs to be a better appreciation of the concerns of the target audiences, e.g. economists in the ministry of finance, and the 'language' they use, e.g. contribution to GDP, jobs created, etc, and a better understanding of the demand for what the project can offer/create, which means key individuals from target audiences need to be engaged in the design process of a mainstreaming project from the very beginning, and ideally, should be part of the executing team. Mapping of ecosystem services and use of infographics appears to be particularly useful forms for informing decision-makers and the former is considered an essential tool for those concerned with planning.
Application:	GEF project teams concerned with mainstreaming ecosystem services into non-environment sectors, and members of project teams concerned with communicating ecosystem services concepts.

I. ANNEXES

1. Terms of Reference for the Evaluation (minus annexes)
2. Evaluation schedule
3. List of people interviewed
4. Bibliography
5. Project logframe (following revision by MTE)
6. Achievement of project objective (as stated in the project's logframe)
7. Overall likelihood of achieving impact
8. Summary of project co-financing at project GEF CEO endorsement

9. Financial management assessment table

10. List of publications from the project

11. Consultant's Resume

12. Response to stakeholder comments

ANNEX 1. TERMS OF REFERENCE FOR THE EVALUATION (MINUS ANNEXES)

Terminal Evaluation of the UNEP/GEF Project

"Project for Ecosystem Services (ProEcoServ)"

II. PROJECT BACKGROUND AND OVERVIEW

1. Project General Information[136]

Table 1. Project summary

UNEP PIMS ID:		IMIS number:	4B34
Sub-programme:	Ecosystem Management	Expected Accomplishment(s):	
UNEP approval date:	02 August 2010	PoW Output(s):	
GEF project ID:	3807	Project Type:	FSP
GEF OP #:	2	Focal Area(s):	Biodiversity
GEF approval date:	August 2009	GEF Strategic Priority/Objective:	BD-SP4; BD-SP5
Expected Start Date:	September 2009	Actual start date:	2 August 2010
Planned completion date:	September 2014	Actual completion date:	October 2015
Planned project budget at approval:	US$ 25, 917,188	Total expenditures reported as of 30 June 2015:	USD14,827,354
GEF Allocation:	US$ 6,296,637	GEF grant expenditures reported as of 30 June 2015	USD5,367,910.83
PDF GEF cost:		PDF co-financing:	
Expected MSP/FSP co-financing:	US$ 19,620,551	Secured MSP/FSP co-financing:	US$ 25,917,188
First Disbursement:	28 January 2011	Date of financial closure:	December 2015
No. of revisions:	3	Date of last revision:	10 June 2014
Date of last Steering Committee meeting:	28 May 2014		
Mid-term review/ evaluation (planned date):	March 2012	Mid-term review/ evaluation (actual date):	
Terminal Evaluation (actual date):	September 2015		

2. Project rationale

1. The GEF Supported Millennium Ecosystem Assessment (MA) concluded that more than 60% of the world's ecosystem services are either degraded or used unsustainably. There is increasing evidence that many changes inflicted by human activities are potentially irreversible, particularly with regard to biodiversity, with likely negative impacts on development and human well-being that are disproportionately borne by disenfranchised people at local levels. Particularly affected are regulating services of the ecosystem, such as air quality regulation, climate regulation at regional and local levels, erosion regulation, water purification and waste absorption, or natural hazard regulation. This degradation constitutes a significant barrier to achieving the Millennium Development Goals, if it is not reversed through a set of changes in policies, institutions and practices to conserve or enhance ecosystem services that avoid negative trade-offs and instead provide positive synergies among ecosystem services.

[136] Source: Project Identification Form (PIF) Sep-Oct 2008

2. The project for Ecosystem Services – ProEcoServ, builds on the GEF supported Millennium Ecosystem Assessment (MA) and its Sub-Global Assessments (SGAs) as well as the MA-follow-up process. The project focuses on addressing some of the identified shortcomings of the MA through closer focus on national assessments, strengthened involvement of stakeholders and introduction of tools, models and methods to decision makers to mainstream ecosystem services into development policies. The project aim to serve as an umbrella and to provide a joint programmatic framework under which four pilot countries re-assesses their MA Sub-Global assessments and develops country-specific activities for decision making.

3. The four pilot countries, Chile, South Africa, Trinidad and Tobago, and Viet Nam, were selected based on their existing and solid SGAs, their demonstrated interest to implement the project, as well as complementarity of the project's activities with national priorities and policies. Within these countries, the project was set to pilot the bundling of ecosystem services and integration of ecosystem service approaches in resource management and decision making.

4. The project aimed to produce information on the linkages and potential trade-offs between ecosystem preservation and development processes, and thus provide better insight into key ecosystem services and how to preserve them sustainably. The incorporation of ecosystem service approaches into local, sub-national and national decision making aimed to further strengthen sustainable use practices, while generating local incentives for the conservation of ecosystems. Incorporating the concept of ecosystem services into decision making may present opportunities to increase financial support for ecosystem conservation and therefore to enhance sustainability of conservation efforts. Increased financing is also envisaged to trigger more support for development of disaster preparedness tools and climate change adaptation mechanisms and therefore strengthen local constituencies' resilience to natural hazards. The project approaches are designed to have scaling-up and replication potential.

5. The project was expected to deliver global environmental benefits in the following areas:

(a) Long-term conservation of species and habitat diversity, linked to reduced direct impacts and increased connectivity with relevant development processes;

(b) Enhanced conservation of ecosystems, such as mangrove wetlands, dry-lands and coastal and marine ecosystems;

(c) Improved protection for species diversity;

(d) Strengthened habitat and ecosystem resilience;

(e) Development of and access to innovative biodiversity conservation financing instruments;

(f) Enhanced complicity and convergence of policy frameworks with ecosystem services approaches.

6. The proposed project was expected to be fully in line with the long-term objective 2 of the GEF's biodiversity focal area strategy. It aimed at mainstreaming biodiversity in production landscapes/seascapes and sectors, and it is compliant with the strategic priorities 4 and 5 through a multi-pronged approach that supports the strengthening of policy and regulatory frameworks for mainstreaming biodiversity, while removing critical knowledge barriers and fostering markets for biodiversity goods and services.

3. Project objectives and components

11. The overall goal of the project **was to better integrate ecosystem assessment, scenario development and economic valuation of ecosystem services into national sustainable development planning**. The project aimed to lead to developing capacities of decision makers, users and beneficiaries of ecosystem services to assess trade-offs and development choices that contribute to strengthened biodiversity and ecosystem resilience, and to develop and apply appropriate ecosystem management tools within sectoral planning frameworks and macroeconomic planning models.

12. The project's global environmental objective is stated as *to reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making*.

The project aims to achieve this objective through implementing four different components, namely:

I. Development of policy support tools;

II. Strengthening of the policy environment;

III. A science-policy interface;

IV. Project management.

12. Component 1: aimed the development of multi-scale and locally valid tools and decision support models so as to particularly enable decision-makers at national and subnational levels to analyse interconnected ecosystem services and drivers of ecosystem change, and to apply this knowledge in development planning and policy making. This comprised, among other tools, mapping of ecosystem services, trade-off matrices that lay out development choices and their potential harm or benefits for ecosystems, scenario development to exemplify the impact of different plausible futures as well as to understand and cope with risks and to building resilience. Furthermore, the scoping for innovative international markets for ecosystem services and their potential for establishing payment for ecosystem services approaches was part of component 1. This included investigative studies into possible opportunities and barriers to PES; conceptual frameworks to support the establishment of markets for ecosystem services at appropriate scale; institutional and regulatory mechanisms, reforms and incentives in support of such markets; and collaboration with local, national and international actors to reach agreements on the potential benefits of adopting ES as an integral part of decision making and planning processes.

13. Component 2: focused on supporting the policy environment and policy implementation for the application of ecosystem management and services approaches at national and transboundary levels. At the political level, this required a degree of awareness by decision making and the public about the potential limits to growth and social welfare changes arising from further unchecked degradation of critical ecosystem services. While this awareness was still not broadly spread, it was nevertheless much greater than at the beginning of the decade, when the MA was conducted.

14. There was also a need to determine suitable legal and regulatory instruments and to utilise these as "entry points" into the decision making process (e.g. annual budgetary allocations by governments; reviews of development assistance programs by donors) through which remedial and pre-emptive actions can be internalised into state actions. At the operational level, this included spatial based ecosystem planning frameworks mapped onto macroeconomic sectoral planning models, or estimations of the response of targeted ecosystem services to increasing levels of degradation and trade-offs between ecosystem services flows (e.g. provisioning versus regulating services).

15. Such information needed to be provided in a terminology that was understandable and tangible to decision makers (e.g. income, employment, fiscal savings). Therefore, component 2 also included the development of systematic outreach and dissemination strategies to reach the appropriate national decision makers and other relevant stakeholders.

16. Component 3: The aim of Component 3 was to contribute to a strengthened science-policy interface for ecosystem-conscious policy making at the international level, through engaging in an intense vertical and horizontal information exchange on ecosystem sciences tools and experiences of relevance to policy making. Among the activities under the objective of strengthened information exchange was:

• The organisation and facilitation of exchange among the national teams under ProEcoServ, through site visits, joint tool development, data and experience exchange, joint workshops and seminars;

• The engagement of ProEcoServ practitioners with other international experts in the area of ecosystem services, so as to increase mutual learning and knowledge about implementation challenges and opportunities;

• The participation in international fora for ecosystem services sciences, in order to promote tools and knowledge gained through ProEcoServ experiences.

17. By utilising existing clearing-house and knowledge management systems, as well as close interaction with international policy platforms (such as MEA COPs, IPBES, IHDP, GLOBE, UN-REDD or TEEB) activities promoted ecosystem services tools, experiences and best practice at national level beyond the demonstration activities, and will provide fora to strengthen multi-scale linkages from local to international actors, as well as to bridge the gap between

science and policy in developing countries. Among the core activities of Component 3 were the implementation of a broad outreach and engagement strategy, particularly to align the development of policy briefs, information materials and the sharing of lessons learned with the relevant international processes, so as to establish pathways and opportunities to inform and influence international policy making with regard to biodiversity and ecosystem services.

18. Through these objectives and activities, Component 3 provided the linkage between practical lessons from tool development and implementation at national and transboundary levels to the international agenda setting arena and thus became an integral part of the overall project strategy to demonstrate how to best integrate ecosystem service tools in policy and decision making with the longer term strategic goal to contribute to the mainstreaming of biodiversity conservation and ecosystem services approaches into sustainable development planning.

1. Development and application of multi-scale and locally valid tools and decision support models to apply these in development planning and policy making.
2. Policy implementation support for the application of ecosystem and ecosystem service management approaches at national and transboundary levels.
3. Strengthening of science-policy interfaces to reinforce multi-scale linkages from local to international actors, as well as to bridge the gap between research results and policy application in developing countries and the international biodiversity arena.

19. Each pilot country has tailored activities and outputs which were designed to meet specific country needs and to be in line with the country base line. Table 2, lists the project's global components, expected outcomes and global outputs.

Table 2. Project's components and related outcomes and outputs[137]

Project Objective: Reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making			
Components	Outcomes	Outputs	Output Revised[138]
Policy Support Tools	1.1 Decision- and policy-makers have access to strengthened capacity and technical advisory services to analyse how their policy decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors.	1.1.1 Spatial mapping of ecosystem services. 1.1.2 Estimation of supply response functions for selected bundles of ecosystem services. 1.1.3 Trade-off matrices produced across ecosystem services, and competing natural resource uses and human well-being. 1.1.4 GIS-based valuation of ecosystem services at sub-national levels, chiefly for regulating services. 1.1.5 Decision support systems to guide decision makers on choosing development strategies which ensure sustainable flow of selected bundle of ecosystem services.	Outputs/milestones for Chile 1.1.1 Spatial mapping of ecosystem services in the pilot areas. 1.1.2 . Development of qualitative and quantitative models for ecotourism and water 1.1.3 Trade-off matrices produced across ecosystem services, and competing natural resource uses and human well-being. 1.1.4 GIS-based valuation of ecosystem services at communal levels, focusing in water provision and ecotourism as ES 1.1.5 Decision support systems to guide decision makers on choosing development strategies which ensure sustainable flow of selected bundle of ecosystem services.
	1.2 Improved understanding in international fora of the		

[137] ProEcoServ Project Document

[138] Revised logframe 18 November 2013

	potential for the development of new financial mechanisms for "non-carbon" ecosystem services	1.1.6 Provision and dissemination of practical tools, guidelines, indicators and information for decision makers at various levels of the pilot countries. 1.1.7 Development of scenario planning as a decision support tool for understanding risk, uncertainty and building resilience. 1.1.8 Scenarios produced for the bundle of ecosystem services under different plausible futures. 1.1.9 Participation of local stakeholder groups in piloting scenario planning. 1.2.1 Scoping for innovative international markets for "non-carbon" ecosystem services	1.1.6 Provision and dissemination of practical tools, guidelines, indicators and information for decision makers at various levels of the pilot countries. 1.1.7 Development of scenario planning with participation of local stakeholders as a decision support tool for understanding risk, uncertainty and building resilience. Outputs/milestones for South Africa 1.1.1 Spatial mapping of ecosystem services 1.1.3 Policy relevant benefits and beneficiaries identified across ecosystem services, and used to explore natural resource management and human well-being 1.1.4. GIS-based valuation of regulating ecosystem services at a national level 1.1.5. Ecosystem services are piloted in existing decision support tools to guide decision makers in choosing sustainable development strategies 1.1.7 Piloting of risk assessment for incorporating ecosystem services into risk management 1.1.8. Risk models produced for the set of ecosystem services under different plausible futures 1.1.9. Participation of local stakeholder groups in piloting risk assessment 1.1.10 Determination of local and transboundary benefits of restoring ecological infrastructure in the catchments of Lesotho Outputs/milestones for Trinidad and Tobago 1.1..1: Spatial mapping of

			ecosystem services 1.1.2: Estimation of supply response functions for selected bundles of ecosystem services 1.1.3: Trade-off matrices produced across ecosystem services, and competing natural resource uses and human well-being 1.1.4: GIS-based valuation of ecosystem services at sub-national levels, chiefly for regulating services 1.1.5: Decision support tools to guide decision makers on choosing development strategies, which ensure sustainable flow of selected bundles of ecosystem services 1.1.6: Provision and dissemination of practical tools, guidelines, indicators and information for decision makers at various levels of the pilot countries 1.1.8: Scenarios produced for the bundle of ecosystem services under different plausible futures 1.1.9: Participation of local stakeholder groups in piloting scenario planning 1.2.1: Scoping for innovative international markets for "non-carbon" ecosystem services Outputs/milestones for Vietnam 1.1.1: Spatial maps developed 1.1.2: Estimation of Supply and response functions of selected bundles of ES 1.1.3: GIS-based valuation of ES, chiefly for regulating services conducted 1.1.4: Locally accepted Scenarios produced for selected bundles of ES and used as a decision support tool.x
Policy	2.1 Increased awareness, understanding and level of	2.1.1 A systematic outreach and dissemination strategy on	Outputs/milestones for Chile

environment	involvement of targeted stakeholders (i.e. government authorities, private sector, ecosystem service users) in the integration of ecosystem services management considerations into policy making processes in the pilot countries 2.2 Ecosystem services are integrated into socio-economic, legal and policy instruments	ecosystem services developed and executed in the four participating countries 2.1.2 An ecosystem services strategy developed for selected SMEs. 2.1.3 Partnerships built for public-private cooperation for ecosystem management 2.2.1 Opportunities and gaps identified in existing legal and regulatory instruments to accommodate ecosystem services (baseline to be established) 2.2.2 Promotion of equitable and pro-poor economic, regulatory and financial incentives for sustaining ecosystem services 2.2.3 Ecosystem services maps and valuation used to inform macroeconomic and sectoral planning 2.2.4 Pilot studies conducted on investment in ecological infrastructure to ensure an accepted minimum and sustainable flow of selected ecosystem services.	2.1.1 A systematic outreach and dissemination strategy on ecosystem services developed and executed 2.1.2 An ecosystem services strategy developed for selected SMEs. 2.1.3 Partnerships for public-private cooperation for ecosystem management showcased 2.2.1 Opportunities and gaps identified in existing legal and regulatory instruments to accommodate ecosystem services 2.2.2 Promotion of equitable and pro-poor economic and financial incentives for sustaining ecosystem services 2.2.4 Pilot studies conducted on investment in ecological infrastructure to ensure an accepted minimum and sustainable flow of selected ecosystem services. Outputs/milestones for South Africa 2.1.1: A systematic outreach and dissemination strategy on ecosystem services developed and executed 2.1.3 Partnerships for public-private cooperation for ecosystem management showcased 2.2.1: Ecosystem service maps and tools used to inform policy and sectoral planning 2.2.2: Promotion of equitable and pro-poor investment in sustaining ecosystem services 2.2.4: Sustainable use of water resources through mainstreaming concepts of ecological infrastructure into water resource planning Outputs/milestones for Trinidad and Tobago 2.1.1: A systematic outreach

			and dissemination strategy on ecosystem services developed and executed 2.1.3 Partnerships for public-private cooperation for ecosystem management showcased 2.2.1: Opportunities and gaps identified in existing legal and regulatory instruments to accommodate ecosystem services 2.2.2: Promotion of equitable and pro-poor economic and financial incentives for sustaining ecosystem services 2.2.3: Ecosystem services maps and valuation used to inform macroeconomic and sectoral planning 2.2.4: Pilot studies conducted on investment in ecological infrastructure to ensure an accepted minimum and sustainable flow of selected ecosystem services Outputs/milestones for Vietnam 2.1.1: A systematic outreach and dissemination strategy on ecosystem services and tools developed and executed at both national and local level 2.2.2: Equitable pro-poor economic, regulatory and financial incentives promoted for sustaining ES 2.2.3: Ecosystem services value maps and valuation used to inform macroeconomic and sectoral planning 2.2.4: Pilot studies on investment in ecological infrastructure conducted to ensure an acceptable minimum and sustainable flow of ES
Science policy interface	3.1 Increased policy relevance of ecosystem services sciences' results in international BD and ES-related processes	3.1.1 Horizontal and vertical information exchange established on ES sciences, tools and policy processes	

		3.1.2 Outreach strategy developed to engage with policy platforms on ecosystem services (e.g. BD-related MEA COPs, IPBES, IHDP, GLOBE, TEEB)	

4. Executing Arrangements

20. UNEP is the GEF-designated *Implementing Agency* (IA) for the project, responsible for overall project supervision to ensure consistency with GEF and UNEP policies and procedures, and was expected to provide guidance on linkages with related UNEP and GEF funded activities. UNEP also had a responsibility for regular liaison with the *Executing Agency* (EA) on substantive and administrative matters, and for participating in meetings and workshops as appropriate. The UNEP Task Manager (TM) and Financial Management Officer (FMO) (located in the UNEP/DEPI/GEF BD-LD Unit) should provide assistance and advice to the EA on project management (e.g. revisions of work plan and budgets) and policy guidance in relation to GEF procedures, requirements and schedules. The TM and FMO are responsible for clearance and transmission of financial and progress reports to the GEF. UNEP is expected to review and approve all substantive reports produced in accordance with the schedule of work.

21. This project falls within the special category of UNEP's "internally executed" GEF projects: *the Executing Agency* of the project is UNEP's Division of Environmental Policy Implementation (DEPI) - Ecosystem Services Economics (ESE) Unit. UNEP/DEPI/ESE was responsible for all aspects of project execution, while UNEP/DEPI/GEF BD/LD Unit to operate as the GEF Implementing Agency, with a supervisory and oversight role, formally participating in the Project's Steering Committee meetings, organising external evaluations with UNEP's external Evaluation and Oversight Unit, reviewing and clearing semi-annual technical and financial reports and the annual PIR (Programme Implementation Reports) for the GEF. The UNEP/DEPI/GEF BD-LD Unit aimed to ensure synergies and cross-fertilisation between ProEcoServ and other similar UNEP GEF projects.

22. The project had to establish a Steering Committee (SC) composed of UNEP/DEPI/ESE as the project EA and UNEP/DEPI/GEF BD-LD Unit as the GEF IA, as well as (a) representatives from the national executing agencies from the pilot countries and (b) external experts with relevant experience in ES studies, MA sub-global assessments and economic valuation worldwide, identified through UNEP/DEPI's international network. The Project Management team had to act as the Secretariat to the SC. The role of the SC was to provide overall project oversight, to evaluate the progress of the project relative to the products expected, to provide strategic directions for the implementation of the project – both at national and global level – and to maintain and promote the necessary inter-institutional coordination outside of the project, so as to promote the dissemination and adoption of ProEcoServ findings. The project also has the option of founding independent technical advisory groups, as required, to provide peer review to tools and approaches used and developed by the project.

23. At the national level, the project executing arrangements differ within the countries involved but each country has the selected institutions responsible for project execution and a project steering committee providing oversight. The national executing agencies were The Center for Advanced Studies on Arid Zones (CEAZA) (Universidad de La Serena and Universidad Católica del Norte) in Chile, the South African Council for Scientific and Industrial Research (CSIR) in South Africa and Lesotho, the University of the West Indies (UWI) in Trinidad and Tobago, and the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) in Viet Nam. The national Executing Agencies were to host national Project Managers responsible for in-country project management, coordination, execution, monitoring and financial/technical reporting.

Table 3. The Project's organizational flow

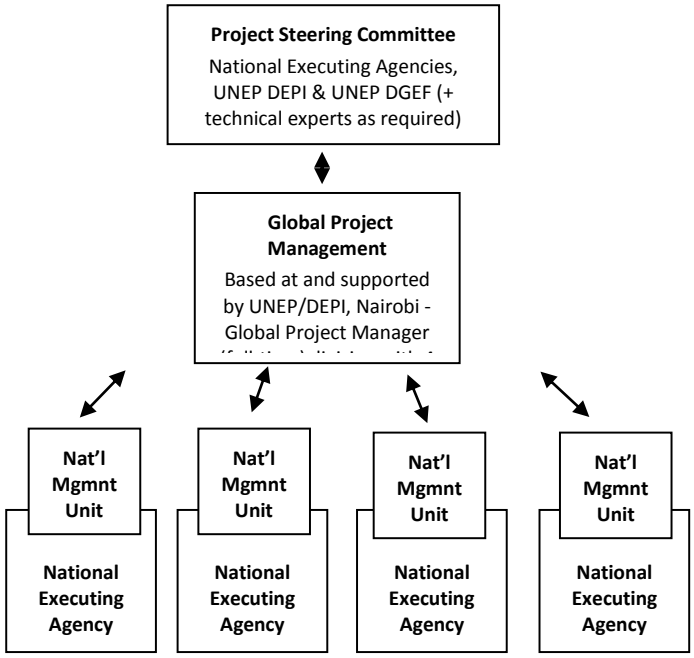
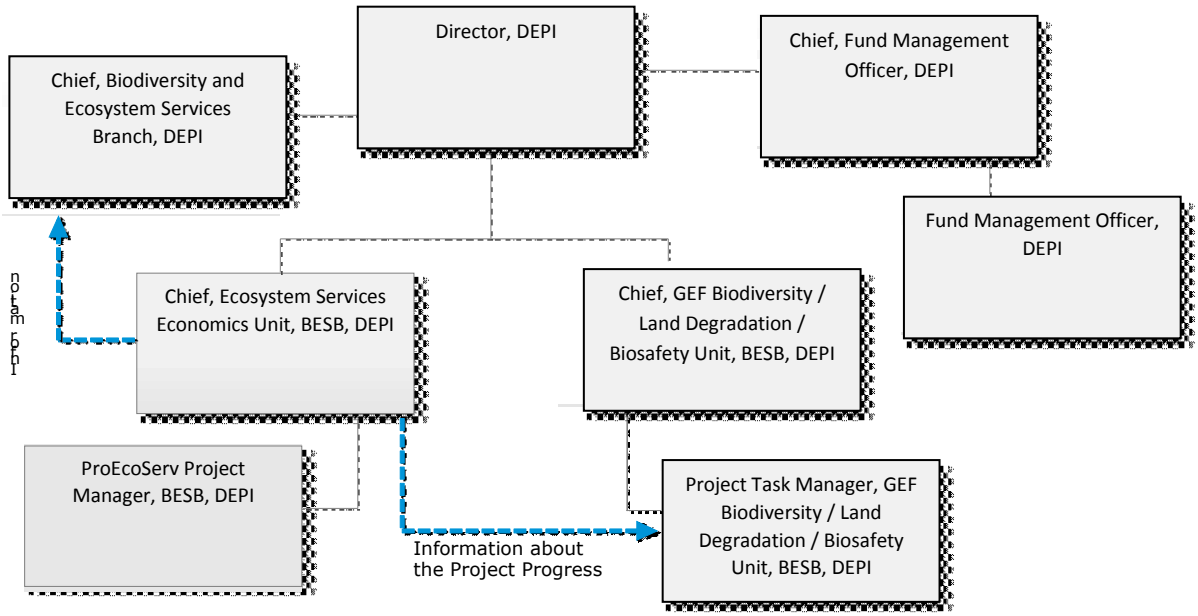


Figure 4: ProEcoServ reporting lines for IA & EA[139]



5. Project Cost and Financing

12. GEF provided 24 % of the external financing to the project (US$ 6,296,637). This put the project in the full-size Project (FSP) category. The project was expected to mobilize another US$ 19,620,551 in co-financing, from the Governments, other UN agencies and NGOs. The estimated project costs at design stage and associated funding sources are presented in Table 4. The total project budget was US$ 25,917,188.

Table 4. Project's budget by co-financing, outcomes and sources

	Project Preparation a	Project b	Total c = a + b	Agency Fee	For comparison: GEF and Co-

[139] Source: ProEcoServ. Mid – Term evaluation

					financing at PIF
GEF financing	67,000	6,296,637	6,363,637	636,364	6,296,637
Co-financing	45,000	19,620,551	19,665,551		14,000,000
Total	112,000	25,917,188	26,029,188	636,364	20,296,637

-

- **Project Framework**

Project Components	GEF Financing*		Co-financing*		Total ($)
	($) a	%	($) b	%	c=a+ b
1. Policy Support Tools	2,859,474	26%	8,290,238	74%	11,149,712
2. Policy Environnent	2,228,163	19%	9,449,954	81%	11,678,117
3. Science-Policy Interface	580,000	36%	1,044,359	64%	1,624,359
4. Project Management	629,000	43%	836,000	57%	1,465,000
Total Project Costs	6,296,637	24%	19,620,551	76%	25,917,188

-

- **Project Co-financing**

Cash		
CSIR, South Africa	1,000,000	5.1
TCF, Trinidad and Tobago	150,000	0.8
Government of Viet Nam	426,250	2.2
RCFEE, Viet Nam	80,000	0.4
Sub-total	1,656,250	8.4
In-kind		0.0
CONAMA, Chile	92,237	0.5
CONAF, Chile	80,000	0.4
DGA, Chile	80,000	0.4
SAG, Chile	80,000	0.4
Sernatur, Chile	80,000	0.4
CEAZA, Chile	400,000	2.0
UDP, Chile	50,000	0.3
Aquacons., Chile	80,000	0.4
Escondida, Chile	100,000	0.5
SQM, Chile	100,000	0.5
IEB, Chile	274,285	1.4
CSIR, South Africa	800,000	4.1
SANBI, South Africa	70,000	0.4
UWI, Trinidad and Tobago	489,915	2.5
TCF, Trinidad and Tobago	144,500	0.7
The Green Fund, Trinidad and Tobago	10,828,674	55.2
ISPONRE, Vietnam	300,000	1.5
PPG, Vietnam	200,000	1.0
RCFEE, Viet Nam	300,000	1.5
IOG, Vietnam	200,000	1.0

IUCN, Vietnam	300,000	1.5
UNPEI	25,000	0.1
NCP	45,000	0.2
UNU	80,000	0.4
UNEP	2,764,690	14.1
Sub-total	17,964,301	91.6
Project Co-financing total	19,620,551	100.0

6. Implementation Issues[140]

24. The project's inception phase run from October 2009 to March 2010, during which the UNEP initial global project execution team was composed and the work-plan was revised. From March 2010 to June 2011, the global team focused on the recruitment of the global project manager, preparation of contracts with the pilot country institutions and organization of the global inception workshop. During this period the country teams have selected and recruited their national project managers and technical teams. Therefore the project became fully operational and fully staffed in June 2011, time when also the global inception workshop was held. From June 2011 to the end of 2011, the countries held their national inception workshops and project launch events. The first global steering committee meeting was also held in May 2012.

25. According to the Project Progress Report for January to June 2012 and the PIR for FY 2012, the total completion rate of activities was around 35 % and the total expenditure around 37 % of total project budget. The project implementation was largely getting on track, even though with the late start of the project a delay in the project completion date was expected.

26. The latest PIR (2014) assessed that the national activities and the joint global activities of ProEcoServ have contributed to strengthening the policy and analytical framework for mainstreaming ecosystem services into development, removing critical knowledge barriers and building capacity in pilot countries. According to the PIR, the project has gained significant momentum and international visibility during that reporting period. At that time the project had completed 85% of its expenditures.

27. In line with the UNEP Evaluation Policy and the UNEP Evaluation Manual, a Mid Term Evaluation (MTE) has been undertaken half way through project implementation to analyse whether the project is on-track, what problems or challenges the project is encountering, and what corrective actions may be required. It was conducted in August 2013 (original date was March 2012). The delay was attributed to the late start of the project implementation. The MTE noted that the project progress across the eleven assessment criteria has been Satisfactory. As per the recommendations of the MTE the log frame has been revised accordingly.

28. Although the project was in baseline review, data collection step in this period, a broad institutional involvement as well as stakeholder participation was a key factor for delivery of planned outcomes. The country teams have been requested to keep close ties with their key stakeholders, which they have identified in their stakeholder analysis. Teams are also asked to review continuously the representatives of their stakeholders and invite all key partners in the project governance.

29. According to the Progress Report 2012, there have been some delays in starting the transboundary component in South Africa because of the major capacity constraints in the area of ecosystem services in Lesotho. The team came up with an alternative arrangement to include the transboundary component. This issue has to be reviewed and discussed in the coming global steering committee meeting and a way forward for the national team should be provided.

30. Also the above mentioned Progress Report, also noted [141]that the national project budgets needed to be revised to reflect the actual situation and provide additional funding for the key activities. This revision process was completed with South Africa and the project budget is now in line with the PCA and the current work-plan. Similar process needed to be completed with the other pilot countries as well.

[140] This is based on information collected in 2012 by the MTE. It should be updated in the inception report.

[141]

31. The terminal evaluation should assess the level in which the recommendations from the MTE have been implemented, and the adequacy of the management response on the MTE proposed solutions.

III. TERMS OF REFERENCE FOR THE EVALUATION

1. Objective and Scope of the Evaluation

32. In line with the UNEP Evaluation Policy[142] and the UNEP Programme Manual[143], the Terminal Evaluation is undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNEP and main project partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation.

33. It will focus on the following sets of **key questions**, based on the project's intended outcomes, which may be expanded by the consultants as deemed appropriate:

a) To what extent has the Project led to increased integration and use of ecosystem service assessment information and tools in policy and decision making at various scales in the target countries?

b) To what extent has the Project increased the policy relevance of ecosystem service science in international BD and ES-related processes?

c) To what extent will the Project contribute to the reduction of threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments into policy and decision making? What is the likely expected impact of the Project in this context?

d) To what extent has the project generated new knowledge on innovative international markets for "non-carbon" ecosystem services?

e) To what extent has the Project supported the strengthening of capacities and technical advisory services to analyse how policy decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors?

f) Did the project take advantage of most recent best practices in ecosystem services?

g) To what extent did the Project implement the recommendations of the MTE?

2. Overall Approach and Methods

34. The Terminal Evaluation of the ProEcoServ Project will be conducted by an independent consultant under the overall responsibility and management of the UNEP Evaluation Office in consultation with the UNEP Task Manager and the Sub-programme Coordinators of the UNEP Ecosystem management Sub-Programme.

35. It will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the consultant(s) maintains close communication with the project team and promotes information exchange throughout the evaluation implementation phase in order to increase their (and other stakeholder) ownership of the evaluation findings.

36. The findings of the evaluation will be based on the following:

(a) A **desk review** of:

Relevant background documentation, *inter alia:*

- UNEP and GEF policies, strategies and programmes, the preliminary documents prepared under the PDF-B grant preceding the project, and the Millennium Ecosystem Assessment and the project terminal evaluation;

[142] http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx

[143] http://www.unep.org/QAS/Documents/UNEP_Programme_Manual_May_2013.pdf

- Project design documents including the Stakeholder participation plan; Annual Work Plans and Budgets or equivalent, revisions to the logical framework and project financing;
- Project reports such as progress and financial reports from the UNEP/DEPI, the four pilot countries, consultants and sub-contractors, meeting minutes of the global and national Steering Committees; annual Project Implementation Reviews (PIRs) and relevant correspondence;
- Documentation related to project outputs:
- Documentation available on the project website www.proecoserv.org.
- Documentation related to project outputs
- MTE of the Project
- Evaluations/reviews of similar projects
- The GEF Secretariat's Annual Monitoring Reports

Interviews (individual or in group) with:

- Project management and execution support in UNEP/DEPI (Nairobi)
- UNEP/GEF Task Manager, ProEcoServ Project Manager and Fund Management Officer (Nairobi)
- UNEP Regional Offices – ROA for South Africa, ROLAC for Chile and Trinidad and Tobago, and ROWA for Viet Nam
- Project executing partners in the pilot countries
- Representatives of the project and pilot country steering committees and the advisory committees,
- Major co-financing (cash and in-kind) partners
- Representatives of major partners and sub-contractors
- Relevant consultants and other project partners

Field visits; The Consultant will be visiting selected pilot countries. The country mission will serve to meet with the project stakeholders and to visit selected demonstration sites if possible. These target countries were selected by the Evaluation Office, in coordination with UNEP/DEPI/ESE, UNEP/GEF/BD-LD Unit, giving due consideration to cost effectiveness, budget and time factors as well as the need for an adequate and representative sample to support the findings of the evaluation.

3. Key Evaluation principles

37. Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned. Analysis leading to evaluative judgements should always be clearly spelled out.

38. The evaluation will assess the project with respect to **a minimum set of evaluation criteria** grouped in six categories: (1) Strategic Relevance; (2) Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) Sustainability and replication; (4) Efficiency; (5) Factors and processes affecting project performance, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, UNEP supervision and backstopping, and project monitoring and evaluation; and (6) Complementarity with the UNEP strategies and programmes. The evaluation consultants can propose other evaluation criteria as deemed appropriate.

39. **Ratings.** All evaluation criteria will be rated on a six-point scale. Annex 3 provides guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

40. **Baselines and counterfactuals**. In attempting to attribute any outcomes and impacts to the project intervention, the evaluators should consider the difference between *what has happened with, and what would have happened without, the project*. This implies that there should be consideration of the baseline conditions, trends and counterfactuals in relation to the intended project outcomes and impacts. It also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions, trends or counterfactuals is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

41. **The "Why?" Question.** As this is a terminal evaluation and a follow-up project is likely [or similar interventions are envisaged for the future], particular attention should be given to learning from the

experience. Therefore, the "*Why?*" question should be at the front of the consultants' minds all through the evaluation exercise. This means that the consultants need to go beyond the assessment of "*what*" the project performance was, and make a serious effort to provide a deeper understanding of "*why*" the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category F – see below). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultants to explain "*why things happened*" as they happened and are likely to evolve in this or that direction, which goes well beyond the mere review of "*where things stand*" at the time of evaluation.

4. A key aim of the evaluation is to encourage reflection and learning by UNEP staff and key project stakeholders. The consultant should consider how reflection and learning can be promoted, both through the evaluation process and in the communication of evaluation findings and key lessons.

5. **Communicating evaluation results**. Once the consultant has obtained evaluation findings, lessons and results, the Evaluation Office will share the findings and lessons with the key stakeholders. Evaluation results should be communicated to the key stakeholders in a brief and concise manner that encapsulates the evaluation exercise in its entirety. There may, however, be several intended audiences, each with different interests and preferences regarding the report. The Evaluation Manager will plan with the consultant which audiences to target and the easiest and clearest way to communicate the key evaluation findings and lessons to them.

6. Evaluation criteria

4.1.1 Strategic relevance

42. The evaluation will assess, in retrospect, whether the project's objectives and implementation strategies were consistent with global, regional and national environmental issues and needs.

43. The evaluation will assess whether the project was in-line with the GEF biodiversity focal area's strategic priorities and operational programme(s).

44. The evaluation will also assess the project's relevance in relation to UNEP's mandate and its alignment with UNEP's policies and strategies at the time of project approval. UNEP's Medium Term Strategy (MTS) is a document that guides UNEP's programme planning over a four-year period. It identifies UNEP's thematic priorities, known as Subprogrammes (SP), and sets out the desired outcomes [known as Expected Accomplishments (EAs)] of the SubProgrammes. The evaluation will assess whether the project makes a tangible/plausible contribution to any of the EAs specified in the MTS 2010-2013. The magnitude and extent of any contributions and the causal linkages should be fully described.

- The evaluation should assess the project's alignment / compliance with UNEP's policies and strategies. The evaluation should provide a brief narrative of the following:

    a. *Alignment with the Bali Strategic Plan (BSP)*[144]. The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.
    b. *Gender balance*. Ascertain to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation. Are the project intended results contributing to the realization of international GE (Gender Equality) norms and agreements as reflected in the UNEP Gender Policy and Strategy, as well as to regional, national and local strategies to advance HR & GE?
    c. *Human rights based approach (HRBA) and inclusion of indigenous peoples issues, needs and concerns*. Ascertain to what extent the project has applied the UN Common Understanding on HRBA. Ascertain if the project is in line with the UN Declaration on the Rights of Indigenous People, and pursued the concept of free, prior and informed consent.

[144] http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf

d. *South-South Cooperation.* This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

45. Based on an analysis of project stakeholders, the evaluation should assess the relevance of the project intervention to key stakeholder groups.

4.1.2 Achievement of Outputs

46. The evaluation will assess, for each component, the project's success in producing the programmed outputs and milestones as presented in Table 2 above, both in quantity and quality, as well as their usefulness and timeliness.

47. Briefly explain the reasons behind the success (or failure) of the project in producing its different outputs and meeting expected quality standards, cross-referencing as needed to more detailed explanations provided under Section F (which covers the processes affecting attainment of project results). Were key stakeholders appropriately involved in producing the programmed outputs?

4.1.3 Effectiveness: Attainment of Objectives and Planned Results

48. The evaluation will assess the extent to which the project's objectives were effectively achieved or are expected to be achieved.

49. The **Theory of Change** (ToC) of a project depicts the causal pathways from project outputs (goods and services delivered by the project) through outcomes (changes resulting from the use made by key stakeholders of project outputs) towards impact (long term changes in environmental benefits and living conditions). The ToC will also depict any intermediate changes required between project outcomes and impact, called 'intermediate states'. The ToC further defines the external factors that influence change along the major pathways; i.e. factors that affect whether one result can lead to the next. These external factors are either drivers (when the project has a certain level of control) or assumptions (when the project has no control). The ToC also clearly identifies the main stakeholders involved in the change processes.

50. The MTE has already reconstructed the ToC of the project based on a review of project documentation and stakeholder interviews. The evaluator will be expected to update and validate the reconstructed TOC with the stakeholders during evaluation missions and/or interviews in order to ascertain the causal pathways identified and the validity of impact drivers and assumptions described in the TOC. This exercise will also enable the consultant to address some of the key evaluation questions and make adjustments to the TOC as appropriate (the ToC of the intervention may have been modified / adapted from the original design during project implementation).

51. The assessment of effectiveness will be structured in three sub-sections:

(a) Evaluation of the **achievement of outcomes as defined in the reconstructed ToC**. These are the first-level outcomes expected to be achieved as an immediate result of project outputs. For this project, the main question will be to what extent the project has contributed to these immediate outcomes.

(b) Assessment of the **likelihood of impact** using a Review of Outcomes to Impacts (ROtI) approach[145]. The evaluation will assess to what extent the project has to date contributed, and is likely in the future to further contribute, to [intermediate states], and the likelihood that those changes in turn to lead to positive changes in the natural resource base, benefits derived from the environment and human well-being.

(c) Evaluation of the **achievement of the formal project overall objective, overall purpose, goals and component outcomes** using the project's own results statements as presented in the Project Document[146]. This sub-section will refer back where applicable to the preceding sub-sections (a) and (b) to avoid repetition in the report. To measure achievement, the evaluation will use as much as appropriate the indicators for achievement proposed in the Logical Framework (Logframe) of the project, adding other relevant indicators as appropriate. Briefly explain what factors affected the project's success in achieving its objectives, cross-referencing as needed to more detailed explanations

[145] Guidance material on Theory of Change and the ROtI approach is available from the Evaluation Office.

[146] Or any subsequent **formally approved** revision of the project document or logical framework.

provided under Section F. Most commonly, the overall objective is a higher level result to which the project is intended to contribute. The section will describe the actual or likely **contribution** of the project to the objective.

a. The evaluation should, where possible, disaggregate outcomes and impacts for the key project stakeholders. It should also assess the extent to which HR and GE were integrated in the Theory of Change and results framework of the intervention and to what degree participating institutions/organizations changed their policies or practices thereby leading to the fulfilment of HR and GE principles (e.g. new services, greater responsiveness, resource re-allocation, etc.)

4.1.4 Sustainability and replication

52. Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition the sustainability of benefits. The evaluation should ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time. The reconstructed ToC will assist in the evaluation of sustainability, as the drivers and assumptions required to achieve higher-level results are often similar to the factors affecting sustainability of these changes.

53. Four aspects of sustainability will be addressed:

(a) *Socio-political sustainability.* Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and other key stakeholder awareness, interests, commitment and incentives? Did the project conduct 'succession planning' and implement this during the life of the project? Was capacity building conducted for key stakeholders? Did the intervention activities aim to promote (and did they promote) positive sustainable changes in attitudes, behaviours and power relations between the different stakeholders? To what extent has the integration of HR and GE led to an increase in the likelihood of sustainability of project results?

a. *Financial resources.* To what extent are the continuation of project results and the eventual impact of the project dependent on financial resources? What is the likelihood that adequate financial resources[147] will be or will become available to use capacities built by the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?

b. *Institutional framework.* To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources, goods or services?

c. *Environmental sustainability.* Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? Are there any foreseeable negative environmental impacts that may occur as the project results are being up-scaled?

54. **Catalytic role and replication**. The *catalytic role* of UNEP interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UNEP also aims to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project has:

[147] Those resources can be from multiple sources, such as the national budget, public and private sectors, development assistance etc.

(a) *catalyzed behavioural changes* in terms of use and application, by the relevant stakeholders, of capacities developed;
   a. provided *incentives* (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour;
   b. contributed to *institutional changes*, for instance institutional uptake of project-demonstrated technologies, practices or management approaches;
   c. contributed to *policy changes* (on paper and in implementation of policy);
   d. contributed to sustained follow-on financing (*catalytic financing*) from Governments, private sector, donors etc.;
   e. created opportunities for particular individuals or institutions ("*champions*") to catalyze change (without which the project would not have achieved all of its results).

55. *Replication* is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluation will assess the approach adopted by the project to promote replication effects and determine to what extent actual replication has already occurred, or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons?

4.1.5 Efficiency

56. The evaluation will assess the cost-effectiveness and timeliness of project execution. It will describe any cost- or time-saving measures put in place in attempting to bring the project as far as possible in achieving its results within its (severely constrained) secured budget and (extended) time. It will also analyse how delays, if any, have affected project execution, costs and effectiveness. Wherever possible, costs and time over results ratios of the project will be compared with that of other similar interventions. The evaluation will also assess the extent to which HR and GE were allocated specific and adequate budget in relation to the results achieved.

57. The evaluation will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency.

4.1.6 Factors and processes affecting project performance

58. **Preparation and readiness**. This criterion focusses on the quality of project design and preparation. Were project stakeholders[148] adequately identified and were they sufficiently involved in project development and ground truthing e.g. of proposed timeframe and budget? Were the project's objectives and components clear, practicable and feasible within its timeframe? Are potentially negative environmental, economic and social impacts of projects identified? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.? Were any design weaknesses mentioned in the Project Review Committee minutes at the time of project approval adequately addressed?

59. **Project implementation and management**. This includes an analysis of implementation approaches used by the project, its management framework, the project's adaptation to changing conditions, the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

(a) Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project milestones, outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?

[148] Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or 'stake' in the outcome of the project. The term also applies to those potentially adversely affected by the project.

a. Evaluate the effectiveness and efficiency of project management and how well the management was able to adapt to changes during the life of the project.
b. Assess the role and performance of the teams and working groups established and the project execution arrangements at all levels with particular attention to the "internal execution" arrangements (i.e. ensuring the adequate separation of duties and responsibilities between UNEP's execution and implementation functions) as put in place by UNEP in Nairobi, including compliance with the recent UNEP guidelines on this specific category of GEF projects, and (b) execution arrangements at country level
c. Assess the extent to which project management responded to direction and guidance provided by the UNEP Task Manager and project steering bodies including global project management group etc.
d. Identify operational and political / institutional problems and constraints that influenced the effective implementation of the project, and how the project tried to overcome these problems.

60. **Stakeholder participation, cooperation and partnerships.** The Evaluation will assess the effectiveness of mechanisms for information sharing and cooperation with other UNEP projects and programmes, external stakeholders and partners. The term stakeholder should be considered in the broadest sense, encompassing both project partners and target users of project products. The TOC and stakeholder analysis should assist the evaluators in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathways from activities to achievement of outputs, outcomes and intermediate states towards impact. The assessment will look at three related and often overlapping processes: (1) information dissemination to and between stakeholders, (2) consultation with and between stakeholders, and (3) active engagement of stakeholders in project decision making and activities. The evaluation will specifically assess:

(a) the approach(es) and mechanisms used to identify and engage stakeholders (within and outside UNEP) in project design and at critical stages of project implementation. What were the strengths and weaknesses of these approaches with respect to the project's objectives and the stakeholders' motivations and capacities?
(b) How was the overall collaboration between different functional units of UNEP involved in the project? What coordination mechanisms were in place? Were the incentives for internal collaboration in UNEP adequate?
(c) Was the level of involvement of the Regional, Liaison and Out-posted Offices in project design, planning, decision-making and implementation of activities appropriate?
(d) Has the project made full use of opportunities for collaboration with other projects and programmes including opportunities not mentioned in the Project Document[149]? Have complementarities been sought, synergies been optimized and duplications avoided?
(e) What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during design and implementation of the project? This should be disaggregated for the main stakeholder groups identified in the inception report.
(f) To what extent has the project been able to take up opportunities for joint activities, pooling of resources and mutual learning with other organizations and networks? In particular, how useful are partnership mechanisms and initiatives to build stronger coherence and collaboration between participating organisations?
(g) How did the relationship between the project and the collaborating partners (institutions and individual experts) develop? Which benefits stemmed from their involvement for project performance, for UNEP and for the stakeholders and partners themselves? Do the results of the project (strategic programmes and plans, monitoring and management systems, sub-regional agreements etc.) promote participation of stakeholders, including users, in environmental decision making?
(h) Was the capacity of each partner organization at the national level adequate to support the timely execution of the demonstration projects within the remaining time frame?
(i) Other potential linkages between on-going UNEP initiatives and ProEcoServ such as:
- ESE-related projects (Inclusive Wealth Report initiative, ecosystem accounting, Food security project in India & Uganda; Valuation of forestry with UN-REDD; Valuation of Sudd wetlands in South Sudan etc.);

[149] [If the ProDoc mentions any opportunities for collaboration with other projects and programmes, present these here in the footnote]

- International Platform for Biodiversity and Ecosystem Services (IPBES) under UNEP's DEPI Biodiversity Unit. Furthermore CSIR and Cropper Foundation are involved in IPBES strengthening the links to ProEcoServ at the country level.

- UNDP-UNEP Poverty-Environment Initiative (PEI)

- Global Legislators Organisation for a Balanced Environment (GLOBE)

61. **Communication and public awareness**. The evaluation will assess the effectiveness of any public awareness activities that were undertaken during the course of implementation of the project to communicate the project's objective, progress, outcomes and lessons. This should be disaggregated for the main stakeholder groups identified in the inception report. Did the project identify and make us of existing communication channels and networks used by key stakeholders? Did the project provide feedback channels?

62. **Country ownership and driven-ness.** The evaluation will assess the degree and effectiveness of involvement of government / public sector agencies in the project, in particular those involved in project execution and those participating in project Steering Committee, partnership arrangements, etc:

(a) To what extent have Governments assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various public institutions involved in the project?
   a. How and how well did the project stimulate country ownership of project outputs and outcomes?

63. **Financial planning and management**. Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

(a) Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;
(b) Assess other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;
   a. Present the extent to which co-financing has materialized as expected at project approval (see Table 1). Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluation will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 4).
   b. Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

64. Analyse the effects on project performance of any irregularities in procurement, use of financial resources and human resource management, and the measures taken UNEP to prevent such irregularities in the future. Determine whether the measures taken were adequate.

65. **Supervision, guidance and technical backstopping.** The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UNEP has a major contribution to make.

66. The evaluators should assess the effectiveness of supervision, guidance and technical support provided by the different supervising/supporting bodies including:

(a) The adequacy of project supervision plans, inputs and processes;
   a. The realism and candour of project reporting and the emphasis given to outcome monitoring (results-based project management);
   b. How well did the different guidance and backstopping bodies play their role and how well did the guidance and backstopping mechanisms work? What were the strengths in guidance and backstopping and what were the limiting factors?

c. Was the operational, managerial and administrative support deployed by UNEP to support the country-level demonstration projects adequate to the task at hand?

67. **Monitoring and evaluation**. The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The evaluation will assess how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

(a) *M&E Design*. The evaluators should use the following questions to help assess the M&E design aspects:

Arrangements for monitoring: Did the project have a sound M&E plan to monitor results and track progress towards achieving project objectives? Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the time frame for various M&E activities specified? Was the frequency of various monitoring activities specified and adequate?

How well was the project logical framework (original and possible updates) designed as a planning and monitoring instrument?

SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?

Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable? For instance, was there adequate baseline information on pre-existing accessible information on global and regional environmental status and trends, and on the costs and benefits of different policy options for the different target audiences? Was there sufficient information about the assessment capacity of collaborating institutions and experts etc. to determine their training and technical support needs?

To what extent did the project engage key stakeholders in the design and implementation of monitoring? Which stakeholders (from groups identified in the inception report) were involved? If any stakeholders were excluded, what was the reason for this? Was sufficient information collected on specific indicators to measure progress on HR and GE (including sex-disaggregated data)?

Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?

Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

Status of the Management Effectiveness Tracking Tool (METT)?

a. *M&E Plan Implementation*. The evaluation will verify that:

- the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;
- PIR reports were prepared (the realism of the Task Manager's assessments will be reviewed)
- Half-yearly Progress & Financial Reports were complete and accurate;
- the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs.

4.1.7 The Consultant's team

68. For this evaluation, the evaluation team will consist of a Consultant. Details about the specific roles and responsibilities of the Consultant are presented in Annex 1 of these TORs. The Consultant should have extensive evaluation experience, including of large, regional or global programmes and using a Theory of Change approach; and a broad understanding of large-scale, consultative assessment processes and factors influencing use of assessments and/or scientific research for decision-making.

69. The Consultant will coordinate data collection and analysis, and the preparation of the main report for the evaluation. The consultants will ensure that all evaluation criteria and questions are adequately covered.

70. By undersigning the service contract with UNEP/UNON, the consultant certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project's executing or implementing units.

4.1.8 Evaluation Deliverables and Review Procedures

71. The Consultant will prepare an **inception report** (see Annex 2(a) of TORs for Inception Report outline) containing a thorough review of the project context, project design quality; a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.

72. It is expected that a large portion of the desk review will be conducted during the inception phase. It will be important to acquire a good understanding of the project context, design and process at this stage. The review of design quality will cover the following aspects (see Annex 7 for the detailed project design assessment matrix):

    - Strategic relevance of the project;
    - Preparation and readiness;
    - Financial planning;
    - M&E design;
    - Complementarity with UNEP strategies and programmes;
    - Sustainability considerations and measures planned to promote replication and up-scaling.

73. The inception report will present a draft, desk-based reconstructed Theory of Change of the project. It is vital to reconstruct the ToC *before* most of the data collection (review of progress reports, in-depth interviews, surveys etc.) is done, because the ToC will define which direct outcomes, drivers and assumptions of the project need to be assessed and measured – based on which indicators – to allow adequate data collection for the evaluation of project effectiveness, likelihood of impact and sustainability.

74. The inception report will also include a stakeholder analysis identifying key stakeholders, networks and channels of communication. This information should be gathered from the Project document and discussion with the project team. See annex 2 for template.

75. The evaluation framework will present in further detail the overall evaluation approach. It will specify for each evaluation question under the various criteria what the respective indicators and data sources will be. The evaluation framework should summarize the information available from project documentation against each of the main evaluation parameters. Any gaps in information should be identified and methods for additional data collection, verification and analysis should be specified. Evaluations/reviews of other large assessments can provide ideas about the most appropriate evaluation methods to be used.

76. Effective communication strategies help stakeholders understand the results and use the information for organisational learning and improvement. While the evaluation is expected to result in a comprehensive document, content is not always best shared in a long and detailed report; this is best presented in a synthesised form using any of a variety of creative and innovative methods. The evaluator is encouraged to make use of multimedia formats in the gathering of information eg. video, photos, sound recordings. Together with the full report, the evaluator will be expected to produce a 2-page summary of key findings and lessons. A template for this has been provided in Annex?.

77. The inception report will also present a tentative schedule for the overall evaluation process, including a draft programme for the country visit and tentative list of people/institutions to be interviewed.

78. The inception report will be submitted for review and approval by the Evaluation Office before the any further data collection and analysis is undertaken.

79. **The main evaluation report** should be brief (no longer than 40 pages – excluding the executive summary and annexes), to the point and written in plain English. The report will follow the annotated Table of Contents outlined in Annex 2. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate. To

avoid repetitions in the report, the authors will use numbered paragraphs and make cross-references where possible.

80. **Review of the draft evaluation report**. The evaluation team will submit a zero draft report to the UNEP EO and revise the draft following the comments and suggestions made by the EO. Once a draft of adequate quality has been accepted, the EO will share this first draft report with the Task Manager, who will alert the EO in case the report would contain any blatant factual errors. The Evaluation Office will then forward the first draft report to the other project stakeholders, for their review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. It is also very important that stakeholders provide feedback on the proposed recommendations and lessons. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UNEP EO for collation. The EO will provide the comments to the evaluation team for consideration in preparing the final draft report, along with its own views.
81. The evaluation team will submit the final draft report no later than 2 weeks after reception of stakeholder comments. The team will prepare a **response to comments**, listing those comments not or only partially accepted by them that could therefore not or only partially be accommodated in the final report. They will explain why those comments have not or only partially been accepted, providing evidence as required. This response to comments will be shared by the EO with the interested stakeholders to ensure full transparency.
82. **Submission of the final evaluation report.** The final report shall be submitted by Email to the Head of the Evaluation Office. The Evaluation Office will finalize the report and share it with the interested Divisions and Sub-programme Coordinators in UNEP, respectively:

Mette Wilkie, Director

Division of Environmental Policy Implementation (DEPI)

United Nations Environment Programme

Nairobi, Kenya

Email: mette.wilkie@unep.org

Ersin Esen, Task Manager

GEF Biodiversity/Land Degradation/Biosafety Unit

Division of Environmental Policy Implementation (DEPI)

United Nations Environment Programme

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Shakira Khawaja, FMO

Division of Environmental Policy Implementation

United Nations Environment Programme

Nairobi, Kenya

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Email: Shakira.Khawaja@unep.org

The final evaluation report will be published on the UNEP Evaluation Office web-site www.unep.org/eou.

83. As per usual practice, the UNEP EO will prepare a **quality assessment** of the zero draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in Annex 3.

84. The UNEP Evaluation Office will assess the ratings in the final evaluation report based on a careful review of the evidence collated by the evaluation consultants and the internal consistency of the report. Where there are differences of opinion between the evaluator and UNEP Evaluation Office on project ratings, both viewpoints will be clearly presented in the final report. The UNEP Evaluation Office ratings will be considered the final ratings for the project.

85. At the end of the evaluation process, the Evaluation Office will prepare a Recommendations Implementation Plan in the format of a table to be completed and updated at regular intervals by the Task Manager. After reception of the Recommendations Implementation Plan, the Task Manager is expected to complete it and return it to the EO within one month. (S)he is expected to update the plan every six month until the end of the tracking period. As this is a Terminal Evaluation, the tracking period for implementation of recommendations will be 18 months, unless it is agreed to make this period shorter or longer as required for realistic implementation of all evaluation recommendations. Tracking points will be every six months after completion of the implementation plan.

4.1.9 Logistical arrangements

86. This Terminal Evaluation will be undertaken by one independent evaluation consultant contracted by the UNEP Evaluation Office. The consultant will work under the overall responsibility of the UNEP Evaluation Office and will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultant' individual responsibility to arrange for their travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize online surveys, and any other logistical matters related to the assignment. The UNEP Task Manager and project team will, where possible, provide logistical support (introductions, meetings etc.) allowing the consultants to conduct the evaluation as efficiently and independently as possible.

4.1.10 Schedule of the evaluation

87. Table 7 below presents the tentative schedule for the evaluation.

Table 7. Tentative schedule for the evaluation

Milestone	Deadline
Development of TOR	July 2015
Hiring of the consultant	October
Inception Report	1 November 2015
Evaluation Mission – 1 week (x 2 – one for SA and one for T&T) – To be confirmed!!	November/December
Telephone interviews, surveys etc.	November/December
Zero draft report	January
Draft Report shared with UNEP Task Manager	January
Draft Report shared with project team	January
Draft Report shared with stakeholders	January
Final Report	February

ANNEX 2. EVALUATION SCHEDULE

Task/Deliverable	Date
Inception period	
Initial desk reviews and preliminary interviews dealing with project design stage and establishing approach, methodology, schedule of work, etc. for the TE	October-November 2015
Submission of final Inception Report	23 November 2015
Data compilation including further desk reviews, interviews with stakeholders in South Africa (November and December 2015), Interviews with stakeholders in Vietnam (April/May 2016), and interviews with international stakeholders, (February, May 2016), organization of fields mission to Trinidad and Tobago, Chile and UNEP HQ in Nairobi (January – March 2016)	December 2015 – March 2016
Field missions period	
Visit to Trinidad and Tobago	14 -21 January 2016
Arrive Port of Spain, Trinidad from UK	Thursday 14 January 2016
Port of Spain (PoS). Meetings with Prof John Agard (ProEcoServ T&T team), Keisha Garcia (ProEcoServ T&T team), and Alexander Girvan (ProEcoServ T&T team), in Port of Spain (PoS)	Friday 15 January 2016
PoS Interview with Lena Dempewolf (ProEcoServ Researcher) and further interview with Prof John Agard	Saturday 16 January 2016
Visit to Asa Wright Centre, Trinidad with Prof John Agard	Sunday 17 January 2016
PoS with visit to Caura Valley. Meetings with Richard Laydon (Green Fund Executing Unit), Runako Osborne (Green Fund Executing Unit) and Leslie-Ann Dillon (Green Fund Executing Unit), in PoS; Omar Mohammed at UWI, and Caura Valley Village Council (CVVC) at Caura Valley with visit to project site and discussion with council members	Monday 18 January 2016
PoS Meeting with Jalaludin Khan (Chaguaramas Development Authority) with field visit to CDA area, Jahson Alemu (ProEcoServ Researcher), and Hayden Romano (Environmental Management Authority)	Tuesday 19 January 2016
PoS. Meeting with Ann Marie Lakhram (Town and Country Planning Division, Ministry of Planning and Sustainable Development), Mrs. Vidiah Ramkhelawan (Ministry of Community Development, Culture and the Arts), Marva Williams and (Central Statistics Office)	Wednesday 20 January 2016
Skype interview with Bobby Andrews (Tobago House of Assembly), and follow-up interviews with Prof John Agard and Keisha Garcia (ProEcoServ T&T team). Return to UK.	Thursday 21 January 2016
UNEP Headquarters, Nairobi	28 February – 6 March 2016
Arrive Nairobi from UK	Sunday 28 February 2016
Meetings with Harriet Matsaert (EO), Niklas Hagelberg (DEPI), Ersin Esen GEF BD TM), Edoardo Zandri (Terrestrial Ecosystems Unit, DEPI), and Mike Spilsbury (EO)	Monday 29 February 2016
Meetings with Neville Ash (Deputy Director, DEPI), Pushpam Kumar (ESE Unit, DEPI), David Smith (PEI), James Ndale (FMO), and Ersin Esen (GEF BD TM)	Tuesday 1 March 2016
Meetings with Mohamed Sessay (GEF Unit), Paulo Nunes (ProEcoServ Coordinator), and Kelly West (GEF Unit)	Wednesday 2 March 2016
Thierry Oliveira (DEWA), Pushpam Kumar (ESE Unit)	Thursday 3 March 2016
Johan Robinson (BD Unit), Paulo Nunes (ProEcoServ Coordinator), Harriet	Friday 4 March 2016

Matsaert and Mike Spilsbury (EO), and Ersin Esen GEF BD TM)	
Flight back to UK	Sunday 6 March 2016
Chile	13-24 March 2016
Arrive La Serena, from UK, via Santiago. Meeting with Bernardo Broitman (ProEcoServ-CL Coordinator, CEAZA)	Monday 14 March 2016
Meeting with Eric Sproles (CEAZA) with field mission to hydrological monitoring station 2 hours drive from La Serena	Tuesday 15 March 2016
Interview with Craig Weideman (CEAZA), Bernardo Broitman. Flight La Serena to Santiago (overnight in Santiago)	Wednesday 16 March 2016
Flight, Santiago-Calama, then vehicle Calama to Antofagasta. Meetings with Arturo Ruiz (DGA-Antofagasta regional) and Jimena Ibarra (MMA Antofagsta regional office)	Thursday 17 March 2016
Antofasgasta to San Pedro de Atacama via Calama by vehicle. Meetings with Marcella Godoy (SERNATUR representative at SPA), head teacher at San Pedro de Atacama senior school (name not recorded). Meeting with Leticia Gonzalez, former head of the ProEcoServ SPA office, current head for CPA	Friday 18 March 2016
Meeting with Sandra Berna, Mayor of SPA. Visit to Moon Valley PA (community run site), interview with PA manager and taxi driver. Meetings with Antonio Cruz (CPA), Eduardo Ildefonso (Fundación de Cultura y Turismo de San Pedro de Atacama) and María Teresa Véliz (SPA Municipal Council) in at Toconao.	Saturday 19 March 2016
Visit to several ecotourism locations around SPA (Laguna Cejar and Laguna Tebinquinche). Informal interviews with tour guides on management of sites around SPA and private sector tourism agency concerns.	Sunday 20 March 2016
Meeting with Leticia Gonzalez (former project manager). Travel San Pedro de Atacama (road) then Calama to Santiago (plane)	Monday 21 March 2016
Meeting with Ximena Nascimento (MMA)	Tuesday 22 March 2016
Flight Santiago- London	Wednesday 23 March 2016
Arrival back in UK	Thursday 24 March 2016
Additional interviews connected with Chile mission with Eleanore (Lea) Merrill and Antonia Zambra (by Skype) who were not available during the mission for a full interview	April- May 2016

ANNEX 3. LIST OF PEOPLE INTERVIEWED

Stakeholder and name	Institution and reason for inclusion in the TE
UNEP	
Paulo Nunes	Current Project Manager for the ProEcoServ Project
Ersin Esen	Current UNEP Task Manager and former GEF Project Manager for the ProEcoServ Project
Edoardo Zandri	Former UNEP Task Manager for the ProEcoServ project (current Chief, Terrestrial Ecosystems Unit, DEPI, UNEP)
Harriet Matsaert	Evaluation Officer, UNEP Evaluation Office
Kelly West	GEF Portfolio Manager
Shakira Khawaja	Senior Financial Management Officer
James Ndale	Financial Management Officer
Niklas Hagelberg	Coordinator, Ecosystem Management Subprogramme
Pushpam Kumar	Chief of Ecosystem Services Economics Unit (ESEU)
Neville Ash	Deputy Director, DEPI
David Smith	UNEP-UNDP Poverty-Environment Initiative DEPI-UNEP
Thierry Oliveira	DEWA, spoke on behalf of Chief Scientist Jacqueline McGlade
Johan Robinson	Chief, Biodiversity Unit, DEPI
Chile	
Leticia Gonzalez	CPA. Former head of the ProEcoServ SPA office, current head for CPA
Antonio Cruz	CPA. Former Treasurer and current President of the CPA
Eduardo Ildefonso	Director de la Fundación de Cultura y Turismo de San Pedro de Atacama.
Jimena Ibarra	Antofagasta MMA (SEREMI). Coordinated the project for the Ministry of the Environment at the regional level
Marcella Godoy	SERNATUR representative at SPA
María Teresa Véliz	Municipal Councilor at SPA with remit covering environment including energy
Bernardo Broitman	CEAZA. Project leader
Arturo Ruiz Miranda	Antofagasta DGA. Member of Steering Committee for activities at SPA
Name not recorded	Headmistress of SPA high school
Eric Sproles	CEAZA. Hydrologist
Craig Weideman	CEAZA Ecosystem Services researcher
Antonia Zambra	CEAZA. Geographer / Former SPA team member
Manuel Cortes Mora	Manager of Valley of the Moon community protected area, SPA
Francisco Pulyen	Tourist taxi driver, based at SPA
Ximena George-Nascimiento	MMA. Chile's GEF focal point
Rodrigo Pizarro	MMA. Part of the MMA division where Ecosystem Services are located (or other at MMA).
Sandra Berna	Mayor of SPA. Head of the local steering committee. May not be a priority and also difficult to meet
Eleanore (Lea) Merrill	Local guide and environmental campaigner, San Pedro de Atacama
South Africa	
Belinda Reyes	Former Project Coordinator for South Africa
Dean Muruven	WWF - strategic water source areas, User of the research generated by Project

Christal Maze	SANBI, member of project team
Niel van Wyk	DWA, and user of the research
Wandile Nomquphu	Water research Commission, benefiting from products (or alternates Yakeen Atarwu, Jacqui Jay, Hermien Roux)
Vanessa Otto-mentz	Insurance Industry (Santam Ltd), benefiting from products
Christo Fabricius	Sustainability Research Unit, Nelson Mandela Metropolitan University, Port Elizabeth
Nabeel Rylands	Disaster Risk Management Western Cape, benefiting from products
John Lonberg	Insurance Industry (Santam Ltd), benefiting from products
Jeanne Nel	CSIR, project team member
Nadia Sitas	CSIR, project team member
Dirk Roux	SanParks, benefiting from products and co-generator
Trinidad and Tobago	
Mrs. Vidiah Ramkhelawan	Permanent Secretary, Ministry of Community Development, Culture and the Arts. Mrs. Ramkhelawan was Permanent Secretary for the former Ministry of the Environment and Water Resources. She also served as the Chair of the T&T ProEcoServ National Steering Committee for most of the project's tenure
Ms. Ann-Marie Lakhran	Technical Officer, Town and Country Planning Division, Ministry of Planning and Sustainable Development. Both Ms. Hinds and Ms. Lakhram were very heavily involved in the technical components of ProEcoServTT related to land use planning (T&T Objective 1)
Ms. Marva Williams	Senior Statistician Agriculture and Environmental Statistics Division. Central Statistical Office. The CSO is a major stakeholder in ProEcoServ, especially with regards to the generation and application of data related to national accounts (T&T Objective 2)
Mr. Richard Laydoo (Head)	Green Fund Secretariat. The Green Fund is an important partner in the PES component of ProEcoServTT (T&T Objective 3).
Runako Osborne	Community Liaison Officer, The Green Fund Secretariat
Leslie-Ann Dillon	Community Liaison Officer, The Green Fund Secretariat
Mr. Hayden Romano (Head, Technical Services)	Environmental Management Authority. Mr Romano was a member of the ProEcoServ national Steering Committee
Professor John Agard	University of the West Indies (UWI). ProEcoServ National Coordinator.
Keisha Garcia	UWI. ProEcoServ T&T Project Manager
Omar Mohammed	Communications Consultant, UWI. ProEcoServ Technical Support. Key member of the ProEcoServ TT Project Management team.
Lena Dempewolf	UWI. ProEcoServ Pollination Research. Key member of the ProEcoServ TT Project Management team.
Jahson Alemu	ProEcoServ Researcher. Marine research on Tobago. Member of the ProEcoServ TT Project Management team.
Executive Membership of Caura Valley Village Council (Malarki, Bickrom Boodoo, Gregpry Barran, Sue Yen Carrera, Ayanna Leith, Claudette Leith)	Caura Valley Village Council (CVVC). The members of the CVVC were heavily involved in the PES component of ProEcoServ in T&T (T&T Objective 3)
Bobby Andrews	Tobago House of Assembly. Mr. Andrews was a member of the ProEcoServ T&T National Steering Committee; and he is very keen to take forward ProEcoServ's thinking in Tobago
Vietnam	
Ms. Nguyen Dieu Trinh	Dept. of Science, Education, Natural Resources and Environment, Ministry of Planning and Investment. Work closely with ProEcoServ to mainstream natural capital/ ecosystem services into the National Strategy for Green Growth

Mrs. Kim Thi Thuy Ngoc	Institute of Strategy and Policy on Natural Resources and Environment. National Project Manager
Mr. Sanath Ranawana	Viet Nam Resident Mission, Asian Development Bank. In collaboration with ProEcoServ to organize some capacity building/awareness raising activities for Greater Mekong Subregion Countries
Dr. Nguyen Trung Thang	ISPONRE Deputy Director General . He is a person in charge of mainstreaming ecosystem services into National Strategy for Environmental Protection to 2020, vision to 2030
Others	
Camille Bann	International consultant for the Mid Term Evaluation of the ProEcoServ Project
Lucy Emerton	Environment Management Group, Sri Lanka, member of Steering Committee
Anil Markandya	Basque Centre for Climate Change, Spain, member of Steering Committee
Salman Hussain	TEEB Coordinator, interest in use of ProEcoServ results

ANNEX 4. BIBLIOGRAPHY

The following key documents and visual outputs were reviewed as part of the TE.

1. UNEP and GEF policies, strategies and programmes pertaining to ecosystem services, biodiversity conservation, development and poverty alleviation;
2. Project design documents, including those related to the Project Identification (PIF) and Project Preparation Grant (PPG) phases;
3. Project Document and appendices;
4. Project reports such as progress and financial reports from the executing agencies to UNEP, including request for project extensions;
5. Synthesis Report and final national reports from each of the the four countries.
6. Project Steering Committee and Technical Committee meeting minutes; annual Project Implementation Reviews (PIRs), and revisions to the logical framework;
7. Project audit report(s), Annual Work Plans and budgets or equivalent and revisions to project financing;
8. GEF Tracking Tools;
9. Communication Strategy, media articles, project newsletter, information on the project on the internet, and other communication products including review of each country's ProEcoServ website;
10. Project-related publications and documents produced by the various project team members of CEAZA, CSIR, UWI and ISPONRE; and
11. Other relevant project correspondence.

ANNEX 5. PROJECT LOGFRAME (FOLLOWING REVISION BY MTE)

	Objectively Verifiable Indicators			Verification Methods	Assumptions
	Indicator	Baseline	Target		

PROJECT OBJECTIVE Reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making	Number of new initiatives or cooperation agreements for improved ecosystem management at various scales, resulting from the project in the pilot areas of four countries	CL: limited capacity for development and implementation of sustainable water use policy, legal frameworks and tools. Limited involvement of disadvantaged community groups (indigenous people) in BD reserves. Few SME involved in ES Management T&T: target wetlands reserves and reefs lacking proper management set-up, resulting in unsustainable use of BD and natural resources VN: limited capacity and tools for sustainable ecosystem management in coastal mangrove areas at the project site ZA/L: valid concepts and baseline studies for sustainable water use practices are in place for 20% of the target water management areas but not currently adopted for political decision making	CL: Sust. water use practices adopted in municipality of 24,000 km^2; Relevant information and decision-making support tools implemented by decision-making bodies. Progress in co-management of 7 BD reserves in place; 10 SMEs or microenterprises trained in ES management T&T: ES incentive scheme or PES model defined, tested and adopted in national policy, and therefore significantly contributing to the enhanced conservation in Trinidad and Tobago VN: Capacity enhanced and tools are available for sustainable management of coastal mangroves areas at the project site of coastal mangrove natural reserves covering approximately 376,569 ha ZA/L: 1 new formal agreement by targeted agencies that they will implement sustainable management practices and contribute to the reduction of threats to biodiversity and ecosystem services in the target areas At least 1 best practice study per pilot submitted is produced and widely disseminated in the ES community of practice	CL: Published water balance study, socially accepted and agreed by main involved stakeholders; publicly available preventive flooding management plan (linked to the above study; Adoption of DSS and best practice recommendations for tourism development by the Municipality of SP de Atacama T&T: Formal dcuments related to the establishment of a pilot incentive scheme or PES model for the Nariva wetland Published provincial and other local land use plans ZA/L: Delivery of integrated decision making tools; cross-sectoral co-governance agreements	CL: Local stakeholder groups and ES users cooperate T&T: Research delivers viable ES incentive scheme/PES pathway; ES management can be incorporated into national policy and plans or legislation VN Decision makers understanding the benefits and willing to use the tools developed by project ZA/L: Resource users are involved in planning and decision making; catchment authorities cooperate Continuous organisational support and stable mandates in the pilot countries National decision makers responsive to ES mainstreaming Continuous organisational support and stable mandates in the pilot countries

<u>Component 1: Policy Support Tools</u> Outcomes: 1.1. Decision- and policy-makers have access to strengthened capacity and technical advisory services to analyse how their policy decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors.	# of targeted decision making processes integrating ES tools	0	At least 2 government decision- and policy-making technical advisory bodies per pilot integrate ES considerations and application tools (generated by the project) in their decision making processes	Project report; tool is used as reference in decision making progress. Progress reports# of information and tool requests # of decision makers part of the project's organisational structure and demonstrating improved understanding of ES concepts (as compared to the baseline) – e.g. verified through capacity scorecards at start and end of project	DMs continue to be interested in tools that integrate ES into policy processes Mechanisms for feeding information to DMs are conducive Organisational stability and mandates are maintained
	# of decision makers aware of the role of ecosystems in risk management	0	At least 1 government and policy making technical advisory bodies per pilot are aware of the role of ES and adopting an ecosystem approach in risk management	Technical reports and stakeholders interviews	DM and local stakeholders continue to be willing to engage in scenario planning
1.2. Improved understanding in international fora of the potential for the development of new financial mechanisms for "non-carbon" ecosystem services	Scoping paper/s produced increase interest in new mechanisms	Limited understanding	At least 1 scoping paper produced	Submitted manuscript	Paper is submitted for publishing
Outputs/milestones for Chile 1.1.1 Spatial mapping of					

Component 2: Policy Environment Outcomes: 2.1. Increased awareness, understanding and level of involvement of targeted stakeholders (i.e. government authorities, private sector, ecosystem service users) in the integration of ecosystem services management considerations into policy making processes in the pilot countries 2.2. Ecosystem management tools are integrated into socio-economic, legal and policy instruments	Level of awareness among decision makers and stakeholders about the importance of ES, and levels of use of ES-related tools Agencies relevant to the project outcomes are engaged in the project and adopt new ES concepts in new policies and/or plans The ES concept is included in documents and relevant official instruments in the four pilots (tbd under output 2.2.1.) ES management tools applied by ProEcoServ lead to an improved management of the targeted ecosystems and are referred to in planning instruments as a pilot initiative (with potential for replication and up-scaling post-project)	Limited and dissimilar understanding of ES among targeted stakeholders Project governance not set-up yet ES is moderately mentioned in policy documents No ES management tools or practices are currently included in relevant policy	All targeted stakeholders have a measurably improved and common understanding of how to integrate ES into policy making Project governance set-up at relevant levels includes high level representatives of national agencies important in the sustainable management of ecosystems Targeted policy and legal instruments at the national and provincial level show measurable increase in including ES management considerations ES management and decision making tools and newly established practices are adopted in at least 2 relevant regional and/or national and /or local government planning instruments per country CL: Sust. water use practice of San Pedro and Best practices in sustainable tourism adopted by the municipality	Surveys at project start and/or end. . Numbers of downloads of tools and resources available at websites Project reports and minutes of meetings Project reports and review of key documents and relevant official instruments Project reports and review of key documents and relevant official instruments	Institutional stability allows for continued participation of key stakeholders in project governance Opportunities to engage decision makers and inform, amend or revise key instruments and policies continue to persist throughout the project life Opportunities to incorporate best practice examples in relevant documents and policy instruments continue to persist during project implementation

<u>Component 3: Science-Policy Interface</u> Outcome 3.1 Increased policy relevance of ecosystem services sciences' results in international BD and ES-related processes *Outputs/milestones* 3.1.1 Horizontal and vertical information exchange established on ES sciences, tools and policy processes 3.1.2 Outreach strategy developed to engage with policy platforms on ecosystem services (e.g. BD-related MEA COPs, IPBES, IHDP, GLOBE, TEEB)	# of international initiatives/processes acknowledging the contribution of ProEcoServ	0	4	Reference to ProEcoServ and its outputs in the documents, websites and publications emerging from other relevant global processes/initiatives	Intl. processes responsive to submissions and tools developed

ANNEX 6. ACHIEVEMENT OF PROJECT OBJECTIVE (AS STATED IN THE PROJECT'S LOGFRAME)

Project Objective - Reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making		
Indicator	**End of Project (EoP) Target**	**Status at TE**
1. Reduced threats to globally important BD through established sustainable use practices and cooperation agreements at various scales in four pilot projects in five countries	**CL**: (i) Sustainable water use practices adopted in municipality of 24,000 km^2 (ii) Relevant information and decision-making support tools implemented by decision-making bodies (iii) Progress in co-management of 7 BD reserves in place (iv) 10 SMEs trained in ES management **SA/L**: Sustainable water use practices adopted in political decision making processes for 10% of the trans-boundary grassland catchments of South Africa and Lesotho **T&T**: ES incentive scheme or PES model defined, tested and adopted in national policy, and therefore significantly contributing to the enhanced conservation in Trinidad and Tobago **VN**: Improved ecosystem management in 376,569 ha of coastal mangrove natural reserves	**Chile – partly achieved**. (i) Water model not adopted, so sustainable water use practices not yet adopted in the municipality. (ii) Relevant information and decision-support tools have been produced by the project, but neither the water-use nor the tourism tool has been adopted by the local authorities or communities. (iii) There has been no co-management of any BD reserves through the project and it is unclear why this was included as a target, and this has never been part of the work programme of the ProEcoServ-CL, although it is certainly an issue that needs to be addressed (indeed, there has been conflict over recent management (or its lack) of local community managed reserves important for biodiversity and ES in the SPA region, especially in relation to visitor management). (iv). Apart from a few individuals from four private companies attending training workshops and awareness-raising meetings on the project at SPA, there has been very little involvement of SMEs in the project at SPA, even among the tourism business community, and training was largely targeted at the use of two tools co-developed by CEAZA, local authorities and community, rather than at ES management directly. **South Africa (including Lesotho) – achieved.** The project has contributed to inclusion of ES thinking into several relevant national level policy and legal instruments, including the National Water Resource Strategy and Disaster Management Amendment Bill, and SANParks is considering extension of to more of its national parks. Whilst it is difficult to estimate the exact area of grasslands catchments impacted, these plans cover the whole of the country, including the grassland Olifants catchment (Use Case 2), which covers a large area of North West South Africa. In addition, adoption of the results from Use Case 3, focused on the Polihali watershed between Lesotho and South Africa, which is largely grassland, and at Eden District which also supports grassland ecosystem, should support sustainable water use practices covering more than 10% of the grassland catchments of South Africa and Lesotho. Due to direct engagement by the ProEcoServ project, the National Development Plan (NDP) includes the explicit mention of ecosystem services, and the National Water Resources Strategy has a focus on investing in ecological infrastructure for water security. The National Disaster Management Act also highlights the potential of ecosystem based management approach to increase the resilience of the territory to risk disasters including from drought and floods. **T&T - partly achieved**. A PES model was partially developed for a project with the Caura Valley community, but was not tested and then adopted in national policy due to issues over local governance and capacity issues, which could not be addressed in time, and its start-up funding (Green Fund), which was beyond the influence of the project. Verification was to be the presence of formal documents related to the establishment of a pilot incentive scheme or PES model for the Nariva wetland (later changed to Caura as a more likely pilot) and

		published provincial and other local land use plans but it is not clear what the latter had to do with the scheme. **Vietnam – achievement uncertain, but unlikely**. The project contributed to a new land management plan for the Ca Mau National Park, which includes large areas of mangroves covering an estimated 43,523 ha (figure given in Synthesis Report) ha[150]. However, it is too soon to say whether this will lead to 'improved ecosystem management' as implementation of the plan will need additional resources and input from other stakeholders and impact will not be clear for some years.
2. Requests for and adoption of ProEcoServ tools and practice examples for bundled ES (from within the project pilot countries and outside)	At least 1 best practice study per pilot submitted is produced and widely disseminated in the ES community of practice At least 1 policy/decision support tool for ES per pilot is produced and widely disseminated in the ES community of practice	**Partly achieved.** Case studies from each of the countries were presented within an overall 'Synthesis Report' for the project published in October 2015 by the ESE Unit in Nairobi. This report has been available for downloaded from the project website (although the website has not been working for some months, and disseminated by the ESE Unit, although the TE encountered various individuals involved with the project e.g. Ministry of Environment in Chile personnel, who had not received a copy by February 2016, so how widespread the report is in the international community is not known, but it appears to be rather less than it could be. Many presentations of the results have been given by the project team, the latest of which was a presentation by the Global Project Manager on the results of the project was given at an international meeting of the Ecosystem Services for Poverty Alleviation in London in November 2015. General information on the decision-support tools, their development and adoption, is included in the above mentioned Synthesis Report, but the tools themselves seem to have had relatively little distribution (and no recorded adoption) in the international community, although, in some cases, they are available through the individual country websites e.g. on the ecotourism model for SPA on http://proecoserv.ceaza.cl/herramientas/modelo-ecoturismo/ and guidelines and some approaches have been distributed by individual countries. There are little direct data on the 'requests for' ProEcoServ tools and practice examples. The number of downloads from the website have been recorded (when it was working), although whether and how people were using the documents is unknown, and there has been no attempt to track usage of project reports, etc, as this would have required greater resources than available to the project.
3. Reference to the concept of ES in development policies of the four pilots	National Socio-Economic Development Plans make reference and/or adopt ES tools generated by the project. These would include: NSDS, CCA/UNDAF, PRSP or SWAP/CAS	**Note**: there is no specific target for this indicator in terms of the number of references, so the TE's assessment is subjective based on interviews and review of project and other documents. **Chile – Not achieved/not relevant.** The focus of the ProEcoServ project in Chile was at the local/municipal level and not the national level, although it was expected that if the models and decision support tools were successful at SPA various elements would be adopted at national level and feed into national level processes. **South Africa – Achieved.** The ProEcoServ-SA has made various contributions to a range of national policy and planning processes drawing on the products and knowledge resulting from the various ProEcoServ-SA use cases and its mainstreaming strategies. These include: the National Development Plan and its Implementation; the

[150] This is the largest area of mangrove in Vietnam, accounting for 40 % of the total area of mangrove in the country. The mangrove ecosystem of Ca Mau plays important role in term of providing many types of ecosystem services including provision, regulating, cultural and supporting services.

		National Infrastructure Plan; Review of the National Water Resources Strategy; Review of the Water Pricing Strategy; Classification of water resources; and Review of the Disaster Management Act, and ProEcoServ-SA has also provided contributions to Guidance for the development of bioregional plans; Norms and standards for biodiversity management plans for ecosystems, and Review of the National Biodiversity Strategy and Action Plan. As an example of more local level success, ProEcoServ maps and decision support tools developed in the Eden pilot by the project have been used to guide provincial and municipal strategies for climate change adaptation and disaster risk reduction, also for private sector (insurance sector). **T&T – Achieved.** The project has contributed to inclusion of ES concept into the Development of Land Bill, Spatial Development Strategy and National Development Plan. Several tools were explored and/or used as a part of ProEcoServ in T&T, including biophysical modeling, valuation (using a range of methods and approaches), and scenario planning. The team produced information/maps on pollination (Nariva Swamp), and soils and erosion potential (Eastern Northern Range), which have fed into spatial planning at the TCPD. Spatial data for Buccoo Reef (coastal erosion ES) has still to be fully compiled and analysed so has not been integrated, but will be particularly relevant to the Institute of marine Affairs (IMA). The team also undertook some preliminary groundwork for a PES scheme, on demonstration accounts for NCA, and guidance on Strategic Environment Assessments (SEA) but none were fully integrated into government practices. **Vietnam – Achieved.** The project influenced various national and provincial level legal and policy instruments including, Party Resolution no. 24-NQ/TW, The National Strategy for Green Growth and National Strategy for Environmental Protection to 2020, vision to 2030. Results of project exercises at Ca Mau were used in the development of a management plan for the Ca Mau National Park, illustrating successful mainstreaming of ES mapping and valuation into land use planning at the local level. Although not tools as such, information on ES and NCA provided by the project team has been included within three key government strategies that address development planning. This was facilitated by a review of planning process at national and provincial level (so two government bodies involved) to identify entry points for mainstreaming processes. However, in none of the countries has there been any quantification of the apparent increase in considerations of ecosystem service management in national policy or legal instruments.
4. Reference to key outputs of ProEcoServ in global processes	Relevant international agreements and platforms (i.e. CBD, Ramsar, IPBES etc.) adopt and recognise the importance of new decision making tools and practice examples.	Note: there is no specific target for this indicator in terms of the number of references, so the TE's assessment is subjective based on a limited number of interviews and review of project and other documents. **Limited clear success.** Again, it is very difficult to assign the source of any specific reference to ES in international agreements and platforms to ProEcoServ, as there are many initiatives similar to ProEcoServ currently operating globally and many of the international processes targeted already adopt an ES approach, e.g. CBD. However, ProEcoServ team members at both the national and international levels have made direct, and recognized, contributions to IPBES. For instance, at the project final workshop in July 2015, synergies with IPBES were examined.

ANNEX 7. OVERALL LIKELIHOOD OF ACHIEVING IMPACT

Results rating of project entitled: Project for Ecosystem Services (ProEcoServ)							
Components (for full list of outputs see Annex 5)	(Immediate project) Outcomes	Rating (D – A)	Medium-term outcomes (MTO) and Intermediate states (IS)	Rating (D – A)	Impact (GEB)	Rating (+)	Overall
Component 1 - Support Tools for Policy Making **Component 2 - Assistance for Policy Implementation** **Component 3 - Bridge between Science and Policy**	IO1. Improved availability of technical capacity (tools, systems, information, trained staff) to decision- and policy-makers to analyse how policy and management decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors in the pilot countries (**strengthened capacity)** IO2. Increased awareness and understanding among targeted stakeholders (government authorities, private sector, ES users and suppliers) of the value of and opportunities for integrating ES management considerations into policy making and planning processes in the pilot countries (**increased awareness**) IO3. IO3. Increased involvement of stakeholders (government authorities, private sector, ES users and suppliers) in decision-making frameworks that use or impact ecosystem services in the pilot countries (**increased stakeholder participation in**	B	MTO1.Ecosystem services approaches, tools, systems and knowledge are fully integrated into policy, legal and planning frameworks and used to guide macroeconomic and sectoral planning MTO2. Improved public and private sector investment with improved human capacity to apply ES approaches, including the increased development of, and access to, innovative financing instruments to support sustainable provision of ES and its component BD MTO3. Increased relevance of ecosystem services approaches, and the science and economics	B-C	Improved status and resilience of globally significant biodiversity and habitats, and stabilisation, improvement and sustainable provision of ecosystem services for human well-being		BC

	decision processes) IO4. Increased availability of data on the science and economics of ecosystem services that can be accessed by decision-makers involved in international BD, ES and development related processes (**increased availability of information for international arena**)		behind them, in national and international sustainable development processes, with an increased connectivity and convergence of policy frameworks with ecosystem service approaches, which were among the long-term aims of the Project. IS1. A reduction of the threats to, and improved protection of, Globally Important Biodiversity and provision of Ecosystem Services				
	Justification for rating:		Justification for rating:		Justification for rating:		
	The project's immediate outcomes were partially delivered but vary by country. Some will feed into continuing national policy and legal processes after project funding closes. There is no single rating category that accurately reflects the delivery of project outcomes.		Some measures designed to move towards mid-term outcomes and intermediate state have started, and have produced initial results.		Project has only achieved limited local, small scale, changes in environmental status, although it was never intended to produce wide impact during the project's lifetime		

ANNEX 8. SUMMARY OF PROJECT CO-FINANCING AT PROJECT CEO ENDORSEMENT

Funding source	US$	%
A. Cost to the GEF Trust Fund	6,296,637	24.3
B. Co-financing	19,620,551	75.7
Cash		
CSIR, South Africa	1,000,000	3.9
TCF, Trinidad and Tobago	150,00	0.6
Government of Viet Nam	426,250	1.6
RCFEE, Viet Nam	80,000	0.3
B.1 Sub-total	1,656, 250	6.4
In-Kind		
CONAMA, Chile	92,237	0.4
CONAF, Chile	80,000	0.3
DGA, Chile	80,000	0.3
SAG, Chile	80,000	0.3
Sematur, Chile	80,000	0.3
CEAZA, Chile	400,000	1.5
UDP, Chile	50,000	0.2
Aquacons, Chile	80,000	0.3
Escondid, Chile	100,000	0.4
SQM, Chile	100,000	0.4
IEB, Chile	274,285	1.1
UWI, Trinidad and Tobago	489,915	1.9
TCF, Trinidad and Tobago	144,500	0.6
GF, Trinidad and Tobago	10,826,674	41.8
ISPONRE, Viet Nam	300,000	1.2
PPG, Viet Nam	200,000	0.8
RCFEE, Viet Nam	300,000	1.2
IOG Viet Nam	200,000	0.8
IUCN, Viet Nam	300,000	1.2
UNPEI	25,000	0.1
NCP	45,000	0.2
UNU	80,000	0.3
UNEP	2,764,690	10.7
B.2 Sub-total	17,964,301	69.3
C. Project total	25,917,188	100

ANNEX 9. CONSULTANT'S RÉSUMÉ

Nigel Varty is an environmental consultant with 30 years of experience in biodiversity conservation policy and planning, particularly in relation to in-situ conservation (e.g. Protected Areas, NBSAPs), sustainable management of natural resources (tourism, fisheries, agriculture, forestry, energy and hunting sectors), institutional capacity building (government and NGO), ecosystem services assessment and ecosystem-based approaches to climate change adaptation, with experience of Environmental and Social Impact Assessment for the business (oil and gas and mining) sector. He has a particular interest in/knowledge of forest, wetland, coastal and island ecosystems, with long- and short-term work experience in over 30 temperate and tropical countries, particularly Least Developed Countries and Small Island Developing States, in Africa, Latin America and the Caribbean, the Western Balkans, Eastern Europe, and the Caucasus, the Middle East, and South-East Asia. He has designed and evaluated many GEF projects for the UNDP, UNEP and The World Bank, in the Biodiversity, International Waters and Land Degradation focal areas, including 11 GEF project and UN evaluations within the last 7 years. He was formerly employed by BirdLife International as a Programme Officer for 6 years.

ANNEX 10. FINANCIAL MANAGEMENT ASSESSMENT TABLE

Financial management components			Rating	Evidence/ Comments
Attention paid to compliance with procurement rules and regulations			HS	Standard UN procurement rules and procedures followed including tenders for contracts where necessary
Contact/communication between the PM & FMO			S	Good working relationship between the FMOs and the two PMs that managed the project during its lifetime. Being located in the same building helped.
PM & FMO knowledge of the project financials			HS	Both PM and FMO regularly in touch with each other and kept up-to-date on finances of the project with financial reporting generally complete and on time. Being physically based in the same building facilitated communication.
FMO responsiveness to financial requests			S	Response to requests judged good (but for TE see comment below)
PM & FMO responsiveness to addressing and resolving financial issues			MU	Frustration over sometimes lengthy response to requests for payment by PM but recent delays have been due to delays with the Cash Office/UNON and introduction of new admin and management system (Umoja) by the Un Secretariat in New York, which has created considerable delays and additional work over payments since June 2015. However, this is not the fault of the FMOs or PMs – it's systemic.
Were the following documents provided to the evaluator:				
A.	An up to date co-financing table	Y		Very late delivery of information to TE (3 months after request)
B.	A summary report on the projects financial management and expenditures during the life of the project - to date	Y/N		Very late delivery of information to TE (3 months after request)
C.	A summary of financial revisions made to the project and their purpose	N		Not provided
D.	Copies of any completed audits	Y/N		No project audit undertaken
Availability of project financial reports and audits			MS	Financial data provided in format of tables as requested but no detailed financial data provided.

Timeliness of project financial reports and audits	U	Very late delivery to TE (3 months after request)
Quality of project financial reports and audits	S	Financial reporting has been generally very good with first PM establishing excel-based project management, reporting and tracking (including financials) system which has helped ensure good up-to-date financial reports
FMO knowledge of partner financial requirements and procedures	S	Feedback from partners during interviews
Overall rating	**MS**	

ANNEX 11. RESPONSE TO STAKEHOLDER COMMENTS

Terminal Evaluation of Terminal Evaluation of the Project: "ProEcoServ" (GEF project ID: 3807)

CONSOLIATED STAKEHOLDER COMMENTS TO THE DRAFT EVALUATION REPORT AND RESPONDS

	Paragraph / section **(as in the current report version)**	**Stakeholder comment**[151]	**Consultant response /action**	**UNEP EO suggestion / response**
	Executive summary and recommendations			
1	***Ex. Summary*** ***Para 4***	*-This sentence is vague. Please quantify "almost"* *-Work of the Viet Nam provided a full set of outputs at the Ca Mau Province, including landuse maps for the Ca Mau Natural Park. This sentence is not correct.* *- Please qualify what issues are these*	*As the EO notes (see column to the right), this is an Executive Summary so details are brief. Delivery of project outputs is covered in some detail in the main report (section 2.10 achievement of outputs), which were not all achieved (hence 'almost'). In addition, this paragraph highlights some of the successful outputs. I have added 'and a good set of outputs at the Ca Mau Province, including landuse maps for the Ca Mau Natural Park' to the paragraph.*	*This is an executive summary. The consultant shall ensure that the details concerning these aspects are discussed in the main report.*

[151] There might be several comments addressing one paragraph or a report section

2	***Ex. Summary*** ***Para 8***	*1.As far as I know, there were specific activities targeting to collaborate with private entities one in Chile (development of a strategy for SMEs) and in South Africa (Eden district insurance work)* *Could you pls elaborate those works and then highlight where could have been the missing areas in engaging with private sector? This could help to clarify "what is disappointing" and would be helpful for future projects.* *2. However, they did engage the insurance sector in the Eden District Municipality.* *From the synthesis report* *…new ways of building resistance and resilience using an ecosystem service-based approach. This included collaborating with the insurance sector in the Eden District Municipality. In the 2014 January floods, damages and losses in this area alone amounted to 66 million USD – double the amount of the annual financial budget of the District Municipality. In this context, cooperative efforts by the insurance sector evolved to understand the drivers of disaster risk in the District Municipality and to identify and implement appropriate response strategies for disaster risk management* *The engament with the private sector was done in accordance to the Description of Work (DoW) of the project. DoW pescribed a strong PPPs in the context of the insurance sector, in SA, as well as in the context of the mining and tourism industries located in SPA, in*	*This is an executive summary so it is not appropriate to give lots of examples – the Exec Sum is long enough already. I have changed the text here essentially to say that the project was government-focused.* *The main text mentions the engagement with the insurance sector in the Eden District Municipality in several places, (e.g. in sections 2.10.2 (achievements of outputs in South Africa) and others), which was very good and important. The 'limited engagement' refers to the relatively small number of private sector companies involved directly with the project (not the degree of their engagement within the project) compared with government bodies, e.g. in T&T. The focus of the project was mostly on government agencies, at least in T&T, Vietnam and Chile. In the latter, interviews at SPA confirmed that engagement with the project by the private sector tourism and mining companies had been low ("disappointing" according to many local interviewees).*	*The consultant shall ensure that these aspects concerning the private sector involvement are reflected in the main report*

		CL. Both were fully addressed in the work of ProEcoServ. Therefore, why "limited engagement" ? – If limited, then please identify the the areas that were not addressed? Where is the gap? In other words, the project delivered an adequate engament with the private sector in accordance to the narrative of DoW.		
3	***Ex. Summary*** ***Para 10***	*1. Statistics office is not the major stakeholder of the TT component.* *Minit of Sust Development and Spatial Planning* *Minis of Environment* *Tobago House are key partners. Pls provide elaboration on these major ones in TT.* *2.* *CSO is not the major stakeholder in TT. Minis of Sust Development and Spatial Planning, Minis of Environment, Tobago House are key partners. In any case, CSO was present in many of the ProEcoServ workshops, including this final workshop with the objective to "take over" the relevant points/outcomes of ProEcoServ to this stakeholder, including the work on Natural Ecosystem Accounting provided by the international consultant Carl Obst.*	*I know the Min Sustainable Development and Spatial Planning were the principal target for the Trinidad and Tobago work but the Central Statistics Office was also key target for the country team. The English is clear here. My text does not say that the CSO was the KEY partner, it says they were one of the 'targets' for the work in Trinidad and Tobago. so the text stands.* *As pointed out, the CSO were a target for the project team in T&T and they were both involved and showed high interest in the project.*	
4	***Ex. Summary*** ***Para 12***	*1.It is surprising to read this comment: Pls see the comment of the donor the GEF Secretariat in their report (GEF/C.48/03; May 08, 2015)* *The project is considered as an early runner of a specific program in GEF6!*	*[The first] comment addressed through change in text. However, according to the members of the PSC interviewed both said that no new approaches were pioneered as such.*	*The current text reflects the GEF6 programme. The consultant may consider articulating what are the other platforms where the catalytic effects did NOT happen (very briefly as this is the executive summary and details should be reflected in the main report).*

		2. Do not agree with this statement. First, the donor himself says the contrary (pls see below comment of the GEF Secretariat in their report (GEF/C.48/03; May 08, 2015)), secondly the work done at ProEcoServ did galvanize significant resource mobilization towards the global process of Natural Capital Accounting, including WAVES. *"The Project for Ecosystem Services Project for Ecosystem Services (UNEP, GEF ID #3807) with pilots in four countries: Chile, South Africa, Trinidad & Tobago and Vietnam underwent its mid-term evaluation in 2013 (GEF $6.3 millions; Co-Financing $24 millions). The project focuses on providing access to scientific information, and developing tools and products to be used in land- and resource use-planning. It builds on the Millennium Ecosystem Assessment (MA), its sub-global assessments (SGA) and the ongoing MA-follow-up process. The project aims at going beyond the science of the MA, developing evidence on how ecosystem services impact welfare and economies, and using this to influence key sector planning frameworks and macro-economic planning models.* ***As such, the project was a precursor of Program 10 in the GEF-6 biodiversity strategy, "Integration of Biodiversity and Ecosystem Services in to Development Finance and Planning". The early results thus far provide evidence that, across a variety of national circumstances, that the objective of Program 10 is achievable.*** *Furthermore, the project has demonstrated how critical the availability and use of science-based biophysical and socio-economic spatial information systems and assessments at relevant scale is for successful biodiversity mainstreaming.*	*The TE acknowledges that the ProEcoServ project was considered a precursor, and fed into the discussions on, GEF-6, and this is already mentioned in paragraph 12 and is repeated in the main text under the section dealing with catalysis and replication (section 2.12.5).* *In other comments a reviewer states that the project did not focus on NCA (except in T&T) yet here there is a statement that 'secondly the work done at ProEcoServ did galvanize significant resource mobilization towards the global process of Natural Capital Accounting, including WAVES.' This seems rather contradictory.* *The evaluation is not aware of the 'significant resource mobilization' (Dollars) that the reviewer mentions in relation to WAVES. This was not clearly reported in PIRs. As for other platforms where ProEcoServ had a clear catalytic effect, this was not clear from information gathered from the TE interviews, and certainly international-level interviewees did not mention any significant impact on other global-level platforms. This may be partly a reflection that there was, in the TE's opinion, no coherent strategy and plan to mainstream project results at the global level (such an exercise using a consultant was suggested at the*	

			beginning of the project by the PM but rejected by more senior staff at UNEP).	
5	***Ex. Summary*** ***Para 13***	*1.Pls also provide the exact starting date of the project i.e the global inception workshop held on 5 June 2011. So the real delay is only six months.* *2. To my understanding, only two countries asked for a 6 month no cost extension. Do not really adds up to 18.*	*No, I disagree. The expected start date is given in table 1 as Sept 2009. The start of a GEF project should not be the inception workshop (held in this case on 5 June 2011). If you take the start date as the inception workshop, i.e. when the project IA and EA have got themselves together and set up the execution arrangements it could take months/years, typically which can take from 3-18 months to arrange. The inception period is part of project execution and if UNEP takes a long time to get to the Inception workshop point then that delay has to be taken into account. My comment stands.* *The TE understands that the project started officially towards the end of September 2009 and the inception workshop was held 5 June 2011, a difference of 20 months. This has been corrected in the text.*	*The consultant shall clarify the exact delay period, no need to change the findings regarding the delays.*
6	***Ex. Summary*** ***Para 14***	*1.a) This is of course the evaluator's assessment [confused project logic and weak design]. But I would like to take your attention that the project design was assessed as Satisfactory at the MTE. Isn't it too much of deviation in between two evaluation reports?* *1.b) Is the design of the project at the focus of the FTE*	*No, I interviewed the MTE consultant who told me that she focused on other things in her report, and, for instance, had relatively little experience with Theory of Change. Also, this issue was mentioned by many of the interviewees who found the logframe confusing and were grateful that the MTE gave them*	*Findings and the rating of the project design (moderately satisfactory) remains.*

		report? The MTE report focused, and assessed, the design of the project. The project design was assessed as Satisfactory at the MTE. If the answer to my first question is yes, then how can we explain such a two disctinct evaluations across the two evaluation reports?	*the opportunity to improve it. This is a common problem with project design in GEF projects which is partly why I have suggested a recommendation to have the design focus on the outcome and objective and higher levels of the causal chain at the design stage with a review of project elements and more definition of outputs and activities at the inception stage.*	
7	***Ex. Summary*** ***Para 14***	*1.Do not fully really understand this statement [struggle with the workload]. No country has expressed to me, as global coordinator, any struggle with the workload. My colleague, and previous global coordinator of ProEcoServ, also informed me that after the MTE Vietnam followed the global team's guidance to reduce the outputs and prioritize the strategic ones. TT insisted on keeping almost all outputs. At the end of the project, TT suggested that some of the deliverables would not be provided, providing a solid, technical argument. These were discussed one-by-one with the Global Coordinator. We reached a consensus on the final range of deliverables, and also agree on reviewing the final outflow of the financial resources allocated to the country.* *2. Pls make the comparison of the logframes before and after MTE for TT and Vietnam. You will see that Vietnam followed the global team's guidance to reduce the outputs and prioritize the strategic ones. TT insisted on keeping almost all outputs.* *Kindly revise this accordingly**.*** *3.Pls list the project activities related to NCA here to*	*I have added in text. The design didn't consider NCA and the ProDoc does not mention it at any point. And GEF funds were not allocated for this as a specific component or activity at the design stage. According to interviews, the NCA component came out of discussions early on in the execution of the project and was promoted by the new head of the ESE Unit as an area he thought important. Trinidad and Tobago and Vietnam showed interest. (In my interviews Vietnam associated their NCA work with the GEF project not the WB) and Trinidad and Tobago took it forward. However, feedback from stakeholders on the draft TE report indicated that ProEcoServ funds were not used for any NCA activities or promotion in Vietnam, and this has been reflected in the main text (e.g. see section 2.12.5 on catalysis and replication and 2.14.1 on preparation and readiness).*	*That is why the evaluations are conducted by an independent evaluator to inform us about the issues that could otherwise remain uncovered.* *The consultant shall also see the stakeholder feedback on the para 369 and see whether findings here (and in para 369) require revision.* *The consultant shall revise this section as per the feedback from Vietnam team (concerning the NCA).*

		be explicit what you mean NCA work of the project.	*The MTE had significant concerns about the inclusion of NCA and the consultant had a lot of experience in this area so this is not the first time the issue has been raised.* *Based on the feedback from Vietnam I have clarified that only T&T took on the NCA element in this paragraph, although Vietnam certainly had an interest in the NCA but it seems no ProEcoServ project funding was used in this. I received conflicting information on this during interviews.*	
8	***Ex. Summary*** ***Para 14***	*1.This is again the same issue that we had in Uganda TE. Is there any real evidence on this "executing body" discussion? I attached the very first version of the project and the UNEP DEPI is the lead executing agency.* *See the document: submitted PIF ProEcoServ.pdf* *2. Could you pls be more precise? Which "issues" are you referring to? During my work, I did not find any evidence leading to the support of such a statement.*	*Whilst, officially (in the PIF), the four countries agreed to UNEP Nairobi acting as the executing agency (EA), there was a belief that South Africa could have acted as the EA and, according to national interviewees who attended the relevant early meetings, there had been some debate over this issue, especially as it was felt that a significant proportion of the GEF grant was needed to cover the UNEP Nairobi EA costs.* *Discussions on this issue predate involvement of any of the current UNEP Nairobi project management team so they may not have been aware of them. The phrase 'were issues' has been changed to 'was some debate'.*	

9	***Ex. Summary Para 15***	*Using the word Unusual.*	*The word 'unusual' or even 'very unusual' arrangement is appropriate here as when I asked Mike Spilsbury (Chief, UNEP Evaluation Office) he told me that he did not know of another case like this. He also said that some time after this arrangement started a policy was developed that there should be a separation of IA and EA on internally executed projects with the IA and EA based in different divisions to avoid claims of conflict of interest. So the ProEcoServ has had a highly unusually management arrangement, which according to one of my UNEP interviews connected with the project did produce a conflict of interest situation; others in UNEP connected with the project said it didn't so there is a difference of opinion within UNEP.*	*It is fine to call it unusual unless anyone has specific examples of the previous use of this arrangement.*
10	***Ex. Summary Para 16***	*Wasn't Olifants and also national mainstreaming components of South Africa far from Stellenbosch? Didn't they have any challenges?*	*As SA had far more capacity and was better organized and had partners based in the region who helped, e.g. WWF-SA working in Oliphants catchment area. Communicating was also good with much better infrastructure and flight connections within SA compared to Vietnam or Chile.*	
11	***Ex. Summary Para 16***	*Could you briefly mention the types of criticism, and the institutions if possible?*	*The main criticism was that the countries felt that UNEP's executing role was very expensive (major part of the budget). I cannot mention specific institutions and individuals as the evaluation interviews are confidential.*	

12	**Ex.summary para 16**	*-Can you please quantify "high turn over" and identify "key personnel" as well as the associated impact with "project delivery" AS WELL AS establishing the causuality? Moreover, what is mean "relationships" and "which partners" are we referring to. In sum, this sentence requires a great deal of explanation, and support by facts. An it stands, this sentence needs to be removed* *- Please identify the type of criticism at stake and the institution that is provides it.*	*These points are discussed in detail in the relevant section of the main text (2.14.1 – 2.14.7 – factors affecting performance). As the EO points out this is an executive summary and needs to be brief.* *High turnover of staff almost always impacts project delivery because new relationships have to be established, new personnel need to learn new systems, etc. I don't see this as a controversial statement.* *In terms of identifying names, as mentioned above, UN evaluations do not identify the names of individuals as information given to the evaluation needs to be treated as confidential and if used then anonymised.*	*This is an executive summary. The consultant shall ensure that these aspects are discussed under the section 'Factors affecting the performance' of the main report.*
13	**Ex. summary para 17**	*The involvement with the private sector and non-env ministries was done with success; just an example of PPPs in SA and the partnership with the Min of Economy in CL, who was also present in the program of the final meeting of ProEcoServ in NBO.*		*Difference in the views of the consultant and the stakeholder.*
14	**Ex.summary para 17**	*- What was the metrics used to measure this performance [awareness of ProEcoServ at UNEP]? What was the ProEcoServ score in this metrics? What were the scores of other GEF projects in UNEP so that we can measure / compare.* *TEEB is a process that started in 2007 and was lead*	*The 'metrics' used to measure awareness of the ProEcoServ at UNEP and outside was based in part on how much interviewees knew about the ProEcoServ during evaluation interviews, e.g. whether they were aware of its aims, whether they were*	*This is an executive summary. The consultant shall ensure that source of information is discussed under the section 'Factors affecting the performance' of the main report.* *Regarding the TEEB visibility at UNEP*

		by the EC till 2010. From that moment, led by UNEP. And I can tell you that in 2010, or 2011, TEEB was not wellknow. The comparison with TEEB is biased: TEEB history and financial records are not comparable with ProEcoServ.	*aware of its results, whether they had had any interaction with the project team, etc. The statement was made because, especially based on interviews with UNEP staff, there was a surprising lack of awareness of ProEcoServ despite it being a UNEP-GEF project. Also, it should not be assumed that just because a project is covered in the UNEP annual report means that UNEP staff must have read it and be promoting the project. Communication and public awareness by the project are covered in some detail in section 2.14.4.* *The comparison with TEEB was made because this is also considered a 'high profile' (flagship) project within UNEP.*	*there appears to be a difference in the views of the consultant and the stakeholder.*
15	***Para 18*** ***(the last sentence)***	*Can you please give a couple of illustrations that support this statement of yours?*	*The lessons are covered in the individual national reports. Some examples of lessons learned in relation to the project from the TE's point of view are given in the main text and also at the end of the Exec Summ section.*	*This is an executive summary. The consultant shall ensure that these aspects are discussed under the section 'Factors affecting the performance' of the main report.*
16	***Para 19 [synthesis report]***	*This statement needs a vivid clarification.* *EACH COUNTRY HAD ITS ON FINAL REPORT.* *THIS INDIVIDUAL FINAL REPORT WAS DRAFTED IN ACCORDANCE TO THE GEF/PROTOCOL FOR THIS KIND OF PROJECTS.* *THE FINAL REPORT WAS BASED ON THIS INFORMATION (as well as on the full list of the*	*In the consultant's experience, usually, GEF projects have a final report, written along the lines of the annual PIR, with sections covering delivery of results and the challenges faced by the project, as well as sustainability or project results, and reporting on funds spent. These are not included in the synthesis report. The synthesis report is therefore 'unusual' in*	*The consultant may clarify briefly the meaning of 'unusual' when referring to the Synthesis report.* *There appears to be a difference in the views of the consultant and the stakeholder in terms of sufficiency of the synthesis report.*

		country deliverables) BUT IT WAS NOT A COPY PASTE EXERCISE. THIS WAS DONE SO AS TO MAX THE RESULTS AND OUTCOMES, SHEDDING LIGHT ON THE METHODS. FOR THIS REASON WE LABEL IT "SYNTHESIS" REPORT. BUT IT IS A TRUE FINAL REPORT, IN ITS CONTENT. This needs to be revised!	*its format. In fact it was written for a different audience. The TE is not criticizing the quality of the synthesis report, but pointing out that it is not in the form of a usual GEF final report and has sections missing which are usually included in such documents and that reporting on sustainability of project results, etc, would have been valuable.*	*Findings/conclusions remain.*
17	***Para 19 [..more intensive and group lesson-learning exercise…]***	*This is available in each country final reports.*		*The evaluation finding is that 'more intensive and group-lesson learning exercise would possibly benefit the project…'. It is not the same as a country final report. The finding/conclusions remain.*
18	***Recommendations in general***	*We appreciate these recommendations, I would like to suggest to divide them up based on the target; individual countries + UNEP, Future GEF projects.*	*In the consultant's opinion, the division and further work on the recommendations should be undertaken by the UNEP management following discussion with the relevant stakeholders as part of the management response to the TE report.*	*The consultant may consider whether to reorganize the recommendations*
19	***Recommendation # 1*** ***(Integration of ProEcoServ results into international processes has been weak …]***	*This is not exactly true. ProEcoServ has been present in WAVES, PTEC WAVES, ESPA, ESP, CBD, and its results widely disseminated among the underlying network. Agree that this integration work could be further developed, however this would had required additional financial resources that were not available.*		*The stakeholder comment is in line with the recommendation: '…Agree that this integration work could be further developed, however this would had required additional financial resources that were not available…' No need to revise the text in the report.*
20	***Recommendation #3***	*Not an intrised recommendation wrt ProEcoServ.*	*The TE does not understand this comment.*	*The stakeholder comment is not clear and thus it cannot be addressed.*

21	***Recommendation # 4***	*Is this type of suggestion ideosyscratic to CL? And this recommendation ideosyscratic to this DSS tool* *How about the work done in field in TT, VN and also in SA? Sometimes a transfer ownership of DATA only, Proecoserv data, to the stakeholder under consideration, would suffice. And many data sets were produced by ProEcoServ teams, most of them of added value to local stakeholders whose information is of direct use, and no transfer of ownership was provided.*	*This recommendation is specific to Chile and the project activities at SPA where there needs to be transfer of the DSS tools. Transfer of ownership is considered to be much better in the other countries (according to interviewees and project reports). The issue in Chile is that there was not really enough time to ensure ownership as there had been major changes to the management of the project around the MTE with a local team installed at SPA which meant really much of the project had to be delivered in only 2 years. I have added some text to the context section of the recommendation to clarify this.*	*The consultant may consider whether to revise the recommendation as per the stakeholder comment.*
22	***Recommendation # 5*** ***(context)***	*Not correct. With the exception of TT, all teams fulfil in 100% the activities and provided the deliverables, as required by the project description. TT assisted to a minor deviation (wich required a adjustment of 50K usd – over a total budget of around a 1m usd) and this WAS contingent on the block of the Green Fund, and underlying co-financing.*	*No, the comment of the reviewer is not correct. For instance, although the DSS tools were developed by the team in Chile (although associated databases still incomplete) they have not yet been taken up (evidence from many interviews at SPA). However, with some additional time and funding this could be still be achieved. In addition, as mentioned by a reviewer above, not all activities where delivered in T&T, so it cannot be said that 100% of activities were done. However, this is a relatively minor point as all four countries were produced some very good outputs and no project ever produces everything it states it will produce (and often there are other unforeseen deliverables, as in*	*The consultant may respond to this comment.*

			this case, e.g. increased cooperation among stakeholders at SPA who previously had conflicts over environment management).	
23	***Recommendation # 7***	*[concering the context description:]* *For Viet Nam, we exchange the project results with other initiatives and coordinate with them while implementing of the project.* *-Work with WWF to apply Invest for vulnerability assessement for other Mekong Delta province (i.e. Ben Tre) under study on EbA (supported by WB)* *- Work with ADB under Core Environmental program to share project experiences at Environmental Minister Meeting in January 2015, co-organized the International Conference on Mainstreaming of Natural Capital in to Decision Making; roles of Natural Capital to attain SDGs* *- Work with WB to organize training courses on Natural Capital Accounting* *-Work with GIZ to share experiences of ES mapping for Vulnerability Assessement under the project Strategic Mainstreaming of EbA* *-Present the project study at CBD 12 in Korea* *-Work with UNDP, GIZ, ADB to develop Natural Capital Platform*	*Although there are some good examples of direct linkage – Vietnam has some good examples, for instance (described in the main text, mostly sections 2.10.4 (achievement of outputs – Vietnam) and 2.14.3 (Stakeholder participation, cooperation and partnerships), overall, the consultant believes the extent of such linkages was relatively weak (given what was expected from the ProDoc). This is in part because Task Managers rarely have the time or an incentive to spend much time on such activities so this is more of an UNEP institutional issue. Related to this, the project would probably have benefited from a specific partnership strategy (especially at global level – see earlier point).* *Please note that the reviewer's comment that (the project in Vietnam undertook) 'Work with WB to organize training courses on Natural Capital Accounting' suggests that there were in fact some ProEcoServ activities related to NCA in Vietnam (see comments above).*	*The consultant may revise/reformulate the context description of the recommendation #7 as deemed necessary.*
24	***Lessons***	*I would have organized the lessons in a different way. First, I would start by lessons at the project level –*	*The ordering of the lessons is a reflection of the order in which they are*	

	section overall	*overall lessons. Then I would complement with additional, country specic lessons. The present list is fragmented and bias towards SA, and it is not clear to me the reaons why.*	*identified in the main text (close to the text from which the lessons are derived).*	
25	***The main report***			
26	***Para 27 (regarding insufficient funds)***	*There was an allocation of 80k usd to the evaluation of the project, BAU. If this aspect was fundamental to the success of the Evaluation, then the resources should not be 80k. We need to work with the resources available. Do not understand this argument.*		*The planned and available evaluation budgets don't always match. Available budget for this evaluation was 40 000 USD. Each evaluation report will address possible evaluation limitations and in this case it was limited funds to conduct evaluation missions to all project locations. We work with the resources available, but these limitation need to be addressed in the report.* *No need to change the text.*
27	***Para 28 [the TE's analysis of the project results in Vietnam is considered the weakest of the four countries]***	*Can be in way of sending questionaire but the evaluator think it is not appropriate one*		*The stakeholder view acknowledged but cannot be addressed any more at this stage as we are currently finalizing the report.*
28	***Para 32 (and para 295)***	*This concept is here used with a very specific meaning. This meaning should be introduces immeaditely after the 1st time that this concept is presented in the text*	*Footnote added.*	*Para 295 defines sustainability as 'For GEF projects sustainability is understood as the probability of project-derived results and impacts continuing over the longer term after project funding and assistance has ended. The TE examined sustainability of the project from the point of view of four parameters: socio-political, financial,*

				institutional and environmental.' *The consultant may add a footnote with this GEF/EO accepted definition.*
29	***Para 32***	*From a scientific, technical view point this is approach is not correct. Here there is no counterfactual. There is no "controlled/no treatment" sample to measure proecoserv against with. And this is key, fundamental point in any experiment, and underlying scientific analysis. My question is: what does the TE mean by 'what would have happened without' the project? How does the TE describe and measure the (selected?) attributes across for this (un-verifiable) state of the world*	*The reviewer is largely correct. An explanation for the lack of a counterfactual is given by the EO in the adjoining column.* *The text on the counterfactual in this paragraph was taken from the Terms of Reference for the TE, which should have been removed. As pointed out by the EO this evaluation was not able to apply econometric or other quantitative approaches to measure impact (but uses a TOC) and does not discuss the counterfactual as such. Consequently, the sentence 'In attempting to attribute any outcomes and impacts to the project, the TE considered the difference between 'what has happened with' and 'what would have happened without' the project (the counterfactual)' has been removed.*	*This evaluation does not apply econometric or other quantitative approaches to measure impact of the project. Considering the nature of the project it would not be feasible to create treatment and control groups or any other kind of experimental set up. Theory-based evaluations (such as this) are becoming increasingly important approach to evaluate interventions (i.e. Stern et all 2012), and is also the approach used by the UNEP EO. The theory-based evaluation do not use counterfactuals based on the experimental set up, but on qualitative analysis of the context etc. (this can be often a challenge in the evaluation phase as many projects have poorly established baselines).* *The EO agrees that the evaluation report does not explicitly discuss about the counterfactual as such, the consultant may consider whether this aspect needs to be clarified in this section or together with the TOC description.*
30	***Para 60 (regarding MTE)***	*That spent 58% of the total budget allocated.*		*The section discusses about the changes to project design (also recommendation by the MTE). No need to discuss about the MTE budget or change the report text.*
31	***Para 68***	*I would suggest not use Wikipedia for the definition of DSS, nor any technical concept, but*		*The footnote acknowledges that there are several definitions for DSS. Utilizing*

		rather go the scholars who developed, and use, it.		*Wikipedia in this particular context/section appears to be credible.* *No need to change the footnote text or source.*
32	***Para 81 (the first sentence)***	*Correct. But why is this listed as #1 in the lessons?* *[A major contribution by the project was seen as the capturing of experience on the development, testing, demonstration and promotion of ES decision-support tools and their mainstreaming into policy and decision-making frameworks (with a different focus on each of these in the four pilot countries].*	*An explanation for the ordering is given above – they are ordered in the sequence in which they appear in the main text.*	*Lesson # 1 appears to be a positive lesson to be taken forward at UNEP and GEF (in the design stage of the future projects). Lessons can be positive or negative lessons deriving from the project results/processes.* *Para 81 is about the intended results of the project (that are the basis for the reconstruction of the TOC). These sections are not contradictory and no changes are needed in the report text.*
33	***Para 81 (the last sentence)***	*Correct. But before it is mentioned that the project did poor in outreaching these same international processes.*		*Para 81 is about the intended results of the project (that are the basis for the reconstruction of the TOC).* *Executive summary presents evaluation findings. One of these is that the project did not succeed in outreach. These sections are not contradictory and no changes are needed in the report text.*
34	***Para 110***	*[The tourism model was the less developed of the two models.]* *Do not understand why you say this. The team explored the combination of TC and CVM is this regard. Pls consult final report.*	*The consultant heard substantial criticism of the tourism model (more so than the hydrology model) by some local interviewees at SPA and Antofagasta, who felt that: a) it lacked the required data to be useful (database with populated data still needs to be fully established with relevant agreements/partnerships to provide the data set up) and b) they did not*	*The consultant may consider clarifying the issues.*

			understand the model (the latter may have been in part due to what was considered a poor presentation by CEAZA on the model at SPA). In addition, interviews with CEAZA staff indicated that data on carrying capacity was still needed for the model to be fully useful. Hence the consultant's opinion that the model was less developed (useable) than the water balance model.	
35	***Para 115***	*At the core of the tourim model, which you label as the "less developed", and I frankly do not understand why.*	*See point above.*	*The consultant may consider revising the text if deemed necessary.*
36	***Lesson 2 (also after para 145)***	*There is a great deal of confusion here. Ecological infrastructure is a stock. This is part of the Natural Capital of a country, or region. As a stock, it can be valued. In both bio-physical and monetary terms. The annual benefits of this asset/stock, are referred as flows. ES is a flow. ES can be valued in monetary terms. ES can be valued in bio-pysical terms.* *THE ADDED VALUE OF THE SA WORK, IN TERMS OF USE OF THE CONCEPT OF ECOLOGICAL INFRASTURE, IS TO SHED LIGHT ON THE ROLE OF THIS ASSET AS A SOURCE OF WEALTH.*	*My interviews revealed a slightly different interpretation. The key word here is 'infrastructure' and South Africa particularly made use of the connection between physical, man-made infrastructure and 'natural or ecological infrastructure' (that is the nature-based equivalent of built or hard infrastructure). I do not disagree that ecological infrastructure can be valued in both economic and bio-physical terms, but by comparing it to the functions of human infrastructure it helps to highlight its value in another way that may resonate more with some people. For instance, the role of ecological infrastructure in reducing flood, storm or wild fire risk, which can cost or destroy human lives (which many people believe shouldn't have a monetary value). Thus some audiences may relate to more directly to*	*The consultant shall clarify any confusion related to these concepts or terms.*

			the parallel with human infrastructure (and the fact that the environment 'builds' this naturally) rather than its pure monetary value. For instance, in SA, some interviewees mentioned that the idea of ecological infrastructure resonated particularly strongly with public works engineers and public planners.	
37	***Para 148***	*Do not understand the reason why this country rating is different from CL or, alternatively why CL rating is different from SA. What exactly is this different due to?*		*In order to assess and rate the delivery of project outputs overall, it is an acceptable approach to break the assessment to smaller units, in this case to country level. This approach also helps to give credit for the participating countries and feedback on country level achievements.* *Based on the reported findings SA was more successful in delivering its intended outputs while Chile faced some challenges. Thus SA was rated higher.* *No need to revise the presentation in the report.*
38	***Para 151 (the last sentence)***	*From this perspective, CL did out perform TT since the data, models and scenario building was done from scratch. There was no data in SPA before ProEcoServ.*	*As the EO mentions above the rating was based on what a country managed to deliver compared to what was originally proposed.* *Chile had a particularly difficult set of challenges, especially as most of the work had to take place in the final two years. That meant that it could not deliver everything (in the TE's opinion) by the end of the project. The rating takes the*	*The consultant may consider whether to revise the findings as per the stakeholder comments.*

			whole period of the project into account (including design), so the lower Chile rating is partly a reflection that the initial project design (for Chile) was perhaps too ambitious and the original management arrangements were not as effective as they could have been. Had the original arrangements and project's level of focus that followed the establishment of the local team at SPA been in place from the start, it is likely that the delivery and rating of the project would have been higher. *I have included additional text under paragraph 151 that reflects the reviewer's comment.*	
39	***Para 151***	*TT hired one of the most prominent technician is the area of NCA who delivered all the work related to NCA. This argument does not hold.* *The fundamental point in TT was the core team, a set of un-experienced researchers (most phd students) that a had a frail supervision and a weak motivation with respect to a sense of belonging to the project. For example, most of the phd students that contributed to the project were not present in the final meeting in Port of Spain, nor followed up with the discussion with Global PM of the material/deliverebles provided.*		*The report text discusses about a struggle with large number of activities. It does not state that NCA work would have not been delivered.*
40	***Para 170***	*I would qualify the selection of the consultant as one the worldwide top experts on the area rather than been based in Australia. Carl Obst is a key element in the design of UN SEEA, Central Framework, as well as contributor the the draft*	*The TE was aware of most of this, but it is not considered so relevant in terms of the evaluation findings.*	*If this is relevant in terms of the evaluation findings the consultant may reflect this in the report if deemed necessary.*

		of the Experimental ES Accounts.		
41	***Para 171*** *[but feedback to the TE was that the Ministry thought that 'the country wasn't anywhere near ready to consider natural capital accounting', which is rather disappointing]*	*This comment comes to me as surprise since both CSO of TT and the PS (herself) from the ministry of env and h20 resources gave exactly a different view, arguing that ProEcoServ played a crucial role in moving forwards. Do not know who is the responsible for this comment, but I would not be surprised that this view is a personal view and not the view of the institution, i.e. Ministry. Formally, elements of partnership were also explored, and the proposed scoping NCA exercise was done on SELECTED items, which had the most relevance in terms of informational contribution to the definition of macro-ecomomic policy, including the feedback from elements of this same Ministry.*		*The surprising nature of this finding is already discussed in this section of the report. No need to further elaborate the issue in the report.*
42	***Para 171*** *[engagement with the ministry finance was disappointing and rather limited]*	*The engagement was done. The engagement contributed in the definition of line of work, including the selection of which accounts to start with. It was a solid, but yet major, interface. But the 1st step this action should be supported and not evaluated negatively. Glass is half-full.*		*Difference in the views of the consultant and the stakeholder.*
43	***Para 173*** *[despite disappointment…]*	*Could you please identify and characterize these [disappointments]?*		*The EO understands that the previous paragraph with the following description reflects these 'disappointments' well. No need to revise the text.* *"Unfortunately, capacity and manpower at the CSO has been and continues to be limited and it would be very difficult for them, as currently organized, to add NCA*

				to their role, as they currently struggle to undertake even their routine tasks. Indeed, at the TE stage the principal member of staff member with a keen interest in the issue who had attended the workshop in Chile was about to be reassigned to another role/area so that there would be even less capacity within CSO."
44	***Para 188 [regarding meta-analytical value transfer methodology]***	*In some cases not even that. The shoreline protection work is based on a wri past study.*		*The evaluation findings align with the stakeholder comment, no need to revise the report text.*
45	***Para 192***	*Again. There was 80K USD for the evaluation. If this visit was crucial, then I would expect to see the associated cost included in the proposed budget for the EO. If that was not the case, then an in-person visit was not ranked of ultimate importance.*		*There was 40 000 USD for this evaluation. Budget constrains are a typical reason that limits the extent of the evaluation field missions. It is a good practice to discuss about these aspects in the evaluation report as they might, in some cases, influence the evaluation findings.*
46	***Para 197***	*The work in VN was characterized by a building a solid partnership for mainstreaming ES at Provincial, National and International levels, with a respective policy uptake including National Green Growth Strategy to 2020 – just to give an example. All of this MEANS that there is a clear political commitment in ProEcoSer work, and its tools.*		*The paragraph 198 discusses about the use of tools at provincial level, not about the political commitment or policy uptake. No need to revise the paragraph unless further evidence on day-to-day use is available.*
47	***Para 205 (regarding TEEB***	*Vietnam was one of the pilots of UNEP-TEEB, UN Statistics Scoping study (in addition to Chile and South Africa):* *http://www.teebweb.org/areas-of-*	*But the TEEB project work was not connected directly with the ProEcoServ project (and no one mentioned it in any of the countries listed during interviews).*	*If the road map developed by the project has been basis for other developments (e.g TEEB) in green accounting in Vietnam it should be indicated here.*

	connection)	*work/advancing-natural-capital-accounting/* *With the help of this work, Vietnam prepared:* *NATIONAL PLAN FOR ADVANCING ENVIRONMENTAL-ECONOMIC ACCOUTING (NP-AEEA) IN VIETNAM* *I can forward it if you want to see it.*	*We cannot count projects as connected just because they occur in the same country, or because UNEP is also has an involvement in another project.* *I based my conclusions on the extent of linkage between the ProEcoServ project and the TEEB project largely on evidence I gathered from interviews – what the interviewees told me (triangulated). There is certainly overlap in terms of the valuing of ecosystem services and natural capital but no one in Vietnam specifically mentioned a direct, formal linkage with the TEEB project. TEEB is based within DTIE within UNEP in Geneva, the ProEcoServ project within DEPI in Nairobi and this separation may also have had an influence on the degree of linkage between the two initiatives. According to interviewees, there was awareness of the ProEcoServ among TEEB staff but no great linkage in terms of shared activities. Perhaps this is lack of awareness of opportunities, but, in my opinion, it was also another indication of the absence of a clear analysis/strategy covering partnerships at the global level between the ProEcoServ and other global-level initiatives, which was suggested by the Project Manager at the beginning of project implementation but not approved by more senior managers inside DEPI.* *Just to note, the reviewer's comment*	*What would have been the added value of a formal linkage between these projects? Or is the main issue lack of awareness of partners about similar initiatives?* *As the TEEB cooperation is also discussed in later sections, it should be sorted out to what extent cooperation between these projects existed and whether the report is missing any key aspects of TEEB and ProEcoserv coop.*

			with 'With the help of this work, Vietnam prepared: NATIONAL PLAN FOR ADVANCING ENVIRONMENTAL-ECONOMIC ACCOUTING (NP-AEEA) IN VIETNAM also suggests that the project team in Vietnam was involved in NCA-related activities (see comments above).	
48	***Para 205 [on WAVES link]***	*Do not really mean what is understood by "formal link". Please note however that there is coordination of the work across the two initiatives, and the information/data is shared. Vietnam is a now a core implementing county of WAVES, and UNEP/ESE Unit is a also a partner of the this global partnership.*	*As it states in the main text 'formal link' was defined by a proposed 'global agreement between UNEP and the WB'.* *I have added a footnote in the main text on the linkage (paragraph 205).*	*The consultant may consider whether to revise the findings as per the stakeholder comments.*
49	***Para 207***	*This competition also helped the Project to stock very nice photos which have been used in Project's global reports as well.*	*This is a minor point and the other countries have also produce good photos.*	
50	***Para 210***	*Viet Nam is by far the country that denotes the highest level of satisfaction. Higher than SA, and this should not be hampered by the lack of an interview.The work done is self-explanatory, including its innovation, quality and policy uptake.*		*The findings are based on the available evidence and the report fairly also indicates that certain uncertainty exists due to constraints in evaluation missions. No need to revise the para or rating.*
51	***Para 217 and 218 (regarding the international visibility)***	*[The consultant and two of the stakeholders disagree on the evidence regarding the international visibility.]*	*The papers [additional list of publication provided by a stakeholder] only reference the project in passing (and one does not seem to mention the project at all) and they are not really high profile publications that are likely to be read widely. My point is that I would have at least expected people on the project's PSC to have considered it to have a profile in the international community*	*The report text is currently revised to reflect some of the forums as an evidence on ProEcoServ's visibility. Also the TEEB related communication is covered.* *The matter of policy impact is difficult. The conclusions drawn in the report are based on the evaluation interviews.*

			but according to them it doesn't and one even said that if they hadn't been involved directly it is unlikely they would have heard about ProEcoServ. This is surprising for a project that UNEP itself promotes as a 'flagship project'.	
52	***Para 216 (a 'rather low profile' internationally)***	*Please elaborate further. Who is saying this? In the area of mainstreaming ES for macro-economic policy and landuse planning, ProEcoServ plays, and it is recognized, as crucial role in moving fwd this agenda. In the context of Africa, ProEcoServ had additional visibility and it is showed by the request of th DG of Afristat to the Director of the AO of UNEP in applying these tools on selected countries of Afristat.*		*That is one finding of the evaluation and this section has been already revised to reflect stakeholder feedback.*
53	***Para 218***	*I would be more precise here and identify the linkages, including the work developed within The Partnership for Action on Green Economy (PAGE)* *Do not see the why DELC would be playing a role here. Could you provide an concrete illustration?.*	*PAGE was not mentioned to me by any interviewee so it is not referenced in the report. In terms of DELC's potential input, I think that is clear from the text in the paragraph – that they deal more directly with the MEAs than DEPI does.*	*The consultant may consider whether to revise the findings as per the stakeholder comments.*
54	***Para 223 (the last sentence)***	*Pls refer to these in above section related to linkage of project to international processes.*		*No need to revise the sections. Visibility of the project is discussed sufficiently in the report.*
55	***Para 227 [preliminary work on strategy paper]***	*This draft was submitted to a discussion. Following the guidelines that emerged from this discussion, there was a review of the initial draft and re-submissopm to Pushpam of a final draft. This material is part of the "hand-over materials".*	*It would appear that this took place after the interviews were conducted for the evaluation. I have not seen any advanced copy – the copy seen by the evaluation was a draft (as stated) – so the text in the report remains unchanged.*	*The consultant may consider whether to revise the findings as per the stakeholder comments.*
56	***Para 230***	*2.Again, one of the main objectives was to present the work of proecoserv along the work*		*A footnote states that UNEP has contested the views presented in the evaluation*

	(regarding final project meeting)	*of other divisions, and international partners in a wider context of mainstreaming ES for macro-econmic policy, where this project plays a key role but it is not the a single element in the international landscape.*		*report regarding the final meeting .*
57	***Para 231*** ***(regarding overall final report)***	*1.All four countries have produced final reports and they were shared with you. The final two PIR provides final works done. I don't know why a specific final report is asked.* *2.This is not correct. The final Project Report is composed by a set 4 minus 1 individual final country reports and this was drafted (the structure) in accordance to the GEF guidelines.* *This structure was not appropriated for a document targeted at a wider dissemination and for this reason there was ALSO drafted, and edited by a the global manager, a synthesis report.*	*For instance, there is no final reporting on the global level activities in the synthesis report, nor on sustainability of project results, nor any financial statement on the project. These are not covered in the four national reports or in the Synthesis report. All other GEF projects (UNEP, UNDP) I have evaluated at TE stage have had final project reports in addition to any synthesis publication that might have been produced. I would have expected that a final report would have been a requirement for GEF.*	*EO revised the sentence to specify that global level activities were not covered in these reports.*
58	***Para 233 [Synthesis Report is also of rather mixed quality and focus]***	*1. Disagree. The content of the work, and its technical complexity, varies across the pilots and this is reflected in the synthesis report.* *2. This is a minor editorial suggestion, makes no significant impact on the overall level of quality and focus of the report. And FYI all the chapters were submitted to a final evaluation by the respective country project team. No feedback along these lines was received. On the contrary. We receive many congratulation on this report, not only by the partners but also from colleagues working in similar areas of work, but hosted in different international organizations.* *3. I really do not agree with this paragraph. It really denotes a lack of understanding of what is*	*Again, the conclusions were based on interviews and my own opinion of reviewing technical documents over many years. Some suggestions for expanding the presentation of the results or an alternative way of presenting them are given in paragraph 233.*	*Difference in the views of the stakeholder and the consultant.*

		here proposed. The structure of the report was extensively discussed by experts, who master the topic and others who deal with communication, and revised by the partners. It is also in alignment with similar products from other international organizations. If the evaluator has a different view, that is respectful. But that is only his subject view. And remains there.		
59	***Para 245***	*Should mentioned the Ministerial Environmental Meeting since the team has share experience with other countries.*	*Several examples are already given in the text, which are considered enough to illustrate the point.*	*The consultant may consider whether to revise the report text as per the stakeholder comments.*
60	***Para 254 [the first sentence]***	*1. Disagree. It was also produced an infographics to provide the information in a "snapshot".* *2. According to the UNEP communication officers that were involved there is not such uncertainty.*		*Difference in the views of a stakeholder and the consultant. Also infographics are acknowledged as good communication outputs in the following sentences. Not necessary to revise the paragraph.*
61	***Para 254 [… including some good recent infographics…]***	*1.? the work done with communication experts – is the ET a communication expert?* *2. ?? this material was available as soon as the final reports were available. Exception for TT that did not produce a final report.*	*On the timing issue, infographics were developed following the final reports as the reviewer says, so they were done late on in the project – hence the word 'recent'.*	*EO does not understand what the stakeholder means with 'ET'. And in addition this section of the report discusses about the infographics as good communication products of the project.* *The consultant may review whether the timing of these infographics need to be specified in the report as per the stakeholder comment.*
62	***Para 255 (a comment regarding databases)***	*A very good point. For example, we could explore EVRI.*	*The consultant is not sufficiently familiar with this database and the advantages from linkage. This is a point for follow-up by DEPI if staff see value.*	*The consultant may consider whether to specify this section as per the stakeholder comment.*

63	***Concerning Medium term outcome 1***	*This is the final or midterm outcome?*		*These are the Medium term outcomes as per the reconstructed TOC (see 2.8.)*
64	***Para 257 [the first sentence of the para]***	*PLEASE do read carefully the infographics, section POLICY UPTAKE. And revise "some good success" to "solid success".*		*Difference in the view of the stakeholder and the evaluation consultant.* *EO acknowledges that 'uptake' is sufficiently discussed in the report (approximately in 20 different sections of the report), some 'good successes' as well as shortcomings are addressed. No need to revise the sections.*
65	***Para 272 (regarding vietnam ministry partner)***	*Please exclude Vietnam. Min of Planning and Investment, the key ministry in resource allocation has been partner of the project in four years.*	*My interviewees in Vietnam, although limited did mention that one of the weaknesses of the project there had been weak linkage with the Ministry of Finance. As I understand it the Ministry of Finance and Ministry of Planning and Investment are separate.*	
66	***Para 272***	*My own experience, with Chile, when I contacted my colleague at the ministry of finance. I had a some problems at the ministry of env, in particular the gef contact person who was not particularly happy to enlarge the particpatation to this ministry.*	*I use the phrase 'no <u>significant</u> engagement' which applied to all the ministries of finance, according to interviewees. I had no problem with connecting with the Ministry of Environment in Chile or the GEF Operational Focal Point.*	*The consultant may consider whether to revise the findings as per the stakeholder comments.*
67	***Para 275 [generally poorly known in the global arena]***	*1.This is a strong statement, and unfair to compare with TEEB, which is an international partnership of over six multilateral and bilatereral development organizations.* *Would it be possible to compare the project's visibility with other GEF funded global*	*I disagree. I don't think this is a strong statement (see my points earlier in the text about the recognition of the project). You will note that I put this as a quote (from two of the interviewees). Every project manager I have come across, quite naturally, thinks their project is*	*The report clearly describes that this statement is based on stakeholder comments (with quotation marks).* *EO agrees that path to policy processes is more complex and not yet proven by citations/visibility.*

		initiatives? *2.* *Non-sense.* *ProEcoServ is widely recognized in the international arena in providing a set of key inputs in the area of NCA and mainstreaming of ES for macro-economic policy. And there are statistics supporting this sentence. On the contrary, this strong statement is biased and reflects a personal view of one respondent. One should be careful in making this kind of GENERAL statements with the feedback from one respondent, who maybe is not fully aware of what is really going in the global arena in this area, we should also ask him/her if she/he knows waves, vantage, iwr, teeb, ipbes, ipcc, and so on.*	*widely known and important for others. This is understandable, but from my perspective as the independent evaluator with 30 years experience in the international environmental field the project does not come across as high profile. Also, as I mentioned earlier, two interviewees at the international level (both considered experts in the field with knowledge of WAVES, Vantage, IPBES, etc) also thought the same. In a way, this doesn't matter as a project should be a means to an end, not an end in itself, but I raise this issue of 'profile' because UNEP claims in its promotion of the project that it is a 'flagship' project (one of UNEP's most important projects).* *I have taken out the reference to TEEB and stated that two global-level interviewees stated that the project is poorly known in global arenas.*	
68	***Para 275***	*Plus UNEP ANNUAL REVIEW 2015, one page drafted in collaboration with UNEP DCPI colleagues*	*The suggestion is more relevant to the section dealing with the communication products from the project I have included this as a footnote in paragraph 254.*	*The consultant may consider whether to revise the section regarding the component 3 as per the stakeholder comment.*
69	***Para 295 (concerning 'considerable success')***	*what is missing to as to achieve "success" rather than "considerable success"*		*Stakeholder opinion.*
70	***Para 298 (word 'mixed')***	*Please complement by saying exactly from here this "mix" comes from.*		*'Mixed' in this context means that there was a diversity of stakeholder views concerning the ownership.*

71	***Para 322***	*In Chile, there was a specific study on the climate change impacts in SPA and possible adaptation options, but Bernardo could provide a better info on this.*	*Perhaps, although I don't think it was done as an actual part of the GEF project (they were already working on this at other sites – the hydrologist took me on a field visit near La Serena (when I interviewed him) where he was collecting water and climate data which is where I think the study mostly comes from. Either way, it wasn't a big part of the GEF project in Chile and wasn't considered at the design stage. I have already added a footnote that mentions the hydrologist's opinion on what is likely to occur in SPA (based on his studies elsewhere).*	
72	***Para 348 (on scoping study)***	*A scoping study doesn't need to have an indicator at outcome level, these activities supported Outcome 2.2. Ecosystem management tools are integrated into socio-economic, legal and policy instruments*	*No, the MTE recommended adding an indicator and targets for the green accounting/NCA work.*	
	Para 350 (the first sentence) (and Para 351, regading NCA)	*There is some confusion here.* *No one claims that ProEcoServ is targeted at changing the accounting system of the pilot country. In any country, ProEcoServ tested the potential in going ahead with the mapping/archicture of selected ES in the context of national accounting. This process was done with the technical support of international experts in this area together with political support of the government and participation of CSO officers. It is not the full menu but it is an excellen "anti-pasto" i.e. scoping exercise*	*The meaning in English is clear (to me) in this paragraph, which doesn't say that the project was going to change the accounting system of the pilot countries. It makes the point that this is a long and demanding task. However, in order to even contribute to this, there needs to be clear idea of what is to be achieved and targets and milestones, which the project lacked because the NCA element was not in the original project document. Consequently, I feel the text should stay as it stands.*	*The consultant may consider whether to revise the text as per the stakeholder feedback.*

73	***Para 350***	*Pls show in the revised logframe how NCA was included?* *I am checking the workplans and the logframe , the only "activity" I find it the scoping study done in TT.*	*I don't disagree with the importance or usefulness of the NCA approach (although it has its flaws like everything). The point here is that there is often enthusiasm for projects to branch out in new directions after they have started because of new interests/topical areas, especially when new staff come in to a project, and this 'mission creep' needs to be monitored. In my opinion, if Trinidad and Tobago had stuck to the areas of work identified at the PPG stage they would have delivered better results but the enthusiasm of some individuals took over on occasion.* *Also, it should be noted that the 'simple scoping study' in Trinidad and Tobago required a lot of effort on the part of those in Trinidad and Tobago, which, although it may not have shown up as a big item of the GEF budget, certainly needed considerable effort in terms of co-financing, time and resources in Trinidad and Tobago.* *As noted in the response to comments above, the text related to NCA has been changed in the main text so no further clarifications are required on this point in the consultant's opinion. Again, it should be noted that the MTE also pointed out this issue and cautioned against developing NCA activities without a clear idea of what could be delivered in the remaining 2-3 years of the project.*	*This section might still require some clarifications in the report.*

74	***Para 358 (challenge in Chile because of the distance between CEAZA, based at La Serena, and SPA)***	*Is this really a problem today? When we sit all day in front of the PC and have access to a wider set of PC based communication tools?*		*Para 358 and 359 discuss about the community level reach and locations of the partners organization, thus EO judges that reach between the partners can be a relevant concern. Not necessary to revise the text.*
75	***Para 364***	*Is this implicitly saying that the second GPM did not "secure sufficient support to effective completion of the country level deliverables"? If that is the case, then this is not correct. Please revise. Please do also approach all the four country leaders and ask this question directly: "did the GPM secure sufficient support to effective completion of your deliverables?"*	*No, there is no such meaning intended here. The sense of the sentence in English is clear (to me). It maintains that there was a high turnover of staff which created issues with continuity (project personnel had to get used to new GPMs, TMs and FMOs, and new UNEP staff had to learn about a complex global project) which inevitably caused delays (an obvious, but nevertheless important point that affects many projects). There is nothing controversial about that in my opinion. The finding is based on the documented dates when staff began and left their posts and direct feedback from the project staff in all four countries about their interactions with the UNEP staff, e.g. on reporting, financial management, etc. This was partly in response to the evaluation question 'Did you have any issues with the management of the project by UNEP staff in Nairobi).*	*Based on the report, it does appear that indeed high turnover of key staff caused implementation issues.* *The consultant may respond to this stakeholder comment and specify the type of data that led to this finding. In case the data sources are sufficient, there is no need for additional data collection.*
76	***(communication and public***	*No mention to infographics?* *Please do refer to these.*		*Para 393 under this section does mention infographics [DCPI were involved at the later stages of the project in advising on*

	awareness)			*the production of infographics for the communicating key messages (very good, and considered effective by recipients).]*
78	***2.14.6 Financial planning and management*** ***(Para 404)***	*Pls let this section be also reviewed by our FMO.*	*The financial data presented were provided by the FMO.*	*The financial data should be provided by the FMO. The consultant may confirm this.*
79	***Recommendation # 1*** ***(Integration of ProEcoServ results into international processes has been weak …]***	*This is not exactly true. ProEcoServ has been present in WAVES, PTEC WAVES, ESPA, ESP, CBD, and its results widely disseminated among the underlying network. Agree that this integration work could be further developed, however this would had required additional financial resources that were not available.*		*The stakeholder comment is in line with the recommendation: '…Agree that this integration work could be further developed, however this would had required additional financial resources that were not available…' No need to revise the text in the report.*
80	***Recommendation #3***	*Not an intrised recommendation wrt ProEcoServ.*	*The TE does not understand this comment.*	*The stakeholder comment is not clear and thus it cannot be addressed.*
81	***Recommendation # 4***	*Is this type of suggestion ideosyscratic to CL? And this recommendation ideosyscratic to this DSS tool* *How about the work done in field in TT, VN and also in SA? Sometimes a transfer ownership of DATA only, Proecoserv data, to the stakeholder under consideration, would suffice. And many data sets were produced by ProEcoServ teams, most of them of added value to local stakeholders whose information is of direct use, and no transfer of ownership was provided.*	*This recommendation is specific to Chile and the project activities at SPA where there needs to be transfer of the DSS tools. Transfer of ownership is considered to be much better in the other countries (according to interviewees and project reports). The issue in Chile is that there was not really enough time to ensure ownership as there had been major changes to the management of the project around the MTE with a local team installed at SPA which meant really much of the project had to be delivered in only 2 years. I have added some text to the*	*The consultant may consider whether to revise the recommendation as per the stakeholder comment.*

			context section of the recommendation to clarify this.	
82	***Recommendation # 5*** ***(context)***	*Not correct. With the exception of TT, all teams fulfil in 100% the activities and provided the deliverables, as required by the project description. TT assisted to a minor deviation (wich required a adjustment of 50K usd – over a total budget of around a 1m usd) and this WAS contingent on the block of the Green Fund, and underlying co-financing.*	*No, the comment of the reviewer is not correct. For instance, although the DSS tools were developed by the team in Chile (although associated databases still incomplete) they have not yet been taken up (evidence from many interviews at SPA). However, with some additional time and funding this could be still be achieved. In addition, as mentioned by a reviewer above, not all activities where delivered in T&T, so it cannot be said that 100% of activities were done. However, this is a relatively minor point as all four countries were produced some very good outputs and no project ever produces everything it states it will produce (and often there are other unforeseen deliverables, as in this case, e.g. increased cooperation among stakeholders at SPA who previously had conflicts over environment management).*	*The consultant may respond to this comment.*
83	***Recommendation # 7***	*[concering the context description:]* *For Viet Nam, we exchange the project results with other initiatives and coordinate with them while implementing of the project.* *-Work with WWF to apply Invest for vulnerability assessement for other Mekong Delta province (i.e. Ben Tre) under study on EbA (supported by WB)*	*Although there are some good examples of direct linkage – Vietnam has some good examples, for instance (described in the main text, mostly sections 2.10.4 (achievement of outputs – Vietnam) and 2.14.3 (Stakeholder participation, cooperation and partnerships), overall, the consultant believes the extent of such linkages was relatively weak (given what was expected from the ProDoc). This is in*	*The consultant may revise/reformulate the context description of the recommendation #7 as deemed necessary.*

		- Work with ADB under Core Environmental program to share project experiences at Environmental Minister Meeting in January 2015, co-organized the International Conference on Mainstreaming of Natural Capital in to Decision Making; roles of Natural Capital to attain SDGs *- Work with WB to organize training courses on Natural Capital Accounting* *-Work with GIZ to share experiences of ES mapping for Vulnerability Assessement under the project Strategic Mainstreaming of EbA* *-Present the project study at CBD 12 in Korea* *-Work with UNDP, GIZ, ADB to develop Natural Capital Platform*	*part because Task Managers rarely have the time or an incentive to spend much time on such activities so this is more of an UNEP institutional issue. Related to this, the project would probably have benefited from a specific partnership strategy (especially at global level – see earlier point).* *Please note that the reviewer's comment that (the project in Vietnam undertook) 'Work with WB to organize training courses on Natural Capital Accounting' suggests that there were in fact some ProEcoServ activities related to NCA in Vietnam (see comments above).*	
84	***Lessons section overall***	*I would have organized the lessons in a different way. First, I would start by lessons at the project level – overall lessons. Then I would complement with additional, country specic lessons. The present list is fragmented and bias towards SA, and it is not clear to me the reaons why.*	*The ordering of the lessons is a reflection of the order in which they are identified in the main text (close to the text from which the lessons are derived).*	
	Other inputs/feedback			
85	***Unspecified section***	*Although the report seems to suggest not much impact at the global level, I should point out that Dr Reyers from SA and myself from TT are Coordinating Lead Authors of different chapters in the IPBES Global assessment now in progress and our experience in ProEcoServ will likely have an influence.*	*I have included this feedback as a footnote in paragraph 215. Although this is an important point, it is not clear exactly what experience from the ProEcoServ will be incorporated into the IPBES Global Assessment process. There may be the opportunity to feed specific results (information and tools) from the ProEcoServ project into the IPBES process*	*The consultant may consider addressing the stakeholder comment in the report text.*

			but this needs to be carefully targeted, and at the TE point which and how results would be promoted had not been clearly defined.	

ANNEX 12. QUALITY ASSESMENT OF THE EVALUATION REPORT

Evaluation Title:

Terminal Evaluation of the UNEP/GEF Project: "Project for Ecosystem Services (ProEcoServ)" **[GEF project ID: 3807]**

All UNEP evaluations are subject to a quality assessment by the Evaluation Office. The quality assessment is used as a tool for providing structured feedback to the evaluation consultants.

The quality of both the draft and final evaluation report is assessed and rated against the following criteria:

	UNEP Evaluation Office Comments as deemed necessary	Draft Report Rating	Final Report Rating
Substantive report quality criteria			
A. **Quality of the Executive Summary: Does the executive summary present the main findings of the report for each evaluation criterion and a good summary of recommendations and lessons learned? (Executive Summary not required for zero draft)**	Final report: The executive summary is well aligned with the main evaluation findings. The lengthy presentation of recommendations and lessons was moved by EO to be part of the main report. Thus the final version of the executive summary focuses only on findings as per the evaluation criteria and recommendations and lessons are presented only in the main report.	5	5
B. **Project context and project description: Does the report present an up-to-date description of the socio-economic, political, institutional and environmental context of the project, including the issues that the project is trying to address, their root causes and consequences on the environment and human well-being? Are any changes since the time of project design highlighted? Is all essential information about the project clearly presented in the report (objectives, target groups, institutional arrangements, budget, changes in design since approval etc.)?**		6	6

C.	**Strategic relevance: Does the report present a well-reasoned, complete and evidence-based assessment of strategic relevance of the intervention in terms of relevance of the project to global, regional and national environmental issues and needs, and UNEP strategies and programmes?**		6	6
D.	**Achievement of outputs: Does the report present a well-reasoned, complete and evidence-based assessment of outputs delivered by the intervention (including their quality)?**		6	6
E.	**Presentation of Theory of Change: Is the Theory of Change of the intervention clearly presented? Are causal pathways logical and complete (including drivers, assumptions and key actors)?**		6	6
F.	**Effectiveness - Attainment of project objectives and results: Does the report present a well-reasoned, complete and evidence-based assessment of the achievement of the relevant outcomes and project objectives?**		6	6
G.	**Sustainability and replication: Does the report present a well-reasoned and evidence-based assessment of sustainability of outcomes and replication / catalytic effects?**		6	6
H.	**Efficiency: Does the report present a well-reasoned, complete and evidence-based assessment of efficiency? Does the report present any comparison with similar interventions?**		6	6
I.	**Factors affecting project performance: Does the report present a well-reasoned, complete and evidence-based assessment of all factors affecting project performance? In particular, does the report include the actual project costs (total and per activity) and actual co-financing used; and an assessment of the quality of the project M&E system and its use for project management?**		6	6
J.	**Quality of the conclusions: Do the conclusions highlight the main strengths and weaknesses of the project, and connect those in a**		6	6

	compelling story line?			
K.	**Quality and utility of the recommendations: Are recommendations based on explicit evaluation findings? Do recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?)'. Can they be implemented?**		6	6
L.	**Quality and utility of the lessons: Are lessons based on explicit evaluation findings? Do they suggest prescriptive action? Do they specify in which contexts they are applicable?**		6	6
Report structure quality criteria				
M.	**Structure and clarity of the report: Does the report structure follow EO guidelines? Are all requested Annexes included?**	Draft report: The report is well structured but much longer than EO recommends. Final report: The report is well structured but much longer than EO recommends. Nevertheless, considering that the evaluation also covered the country level work very comprehensively, and takes into account several stakeholder comments requesting for specific details, the EO judges that the length of the report is justified.	5	5
N.	**Evaluation methods and information sources: Are evaluation methods and information sources clearly described? Are data collection methods, the triangulation / verification approach, details of stakeholder consultations provided? Are the limitations of evaluation methods and information sources described?**	Draft report: Minor methodological clarifications needed to be done to the draft report. Final report: The final report draft was revised as per stakeholder/EO comments.	5	6
O.	**Quality of writing: Was the report well written? (clear English language and grammar)**		6	6
P.	**Report formatting: Does the report follow EO guidelines using headings, numbered paragraphs etc.**	Final report: UNEP EO finalized report formatting to meet the requirements.	3	6
		OVERALL REPORT QUALITY RATING	5	6

The quality of the evaluation process is assessed at the end of the evaluation and rated against the following criteria:

		UNEP Evaluation Office Comments		Rating
Evaluation process quality criteria				
Q.	**Preparation: Was the evaluation budget agreed and approved by the EO? Was inception report delivered and approved prior to commencing any travel?**	The EO faced some challenges to secure sufficient funds for the evaluation.		4
R.	**Timeliness: Was a TE initiated within the period of six months before or after project completion? Were all deadlines set in the ToR respected?**	Due to several administrative issues the TE process was delayed.		2
S.	**Project's support: Did the project make available all required documents? Was adequate support provided to the evaluator(s) in planning and conducting evaluation missions?**			6
T.	**Recommendations: Was an implementation plan for the evaluation recommendations prepared? Was the implementation plan adequately communicated to the project?**	This is being prepared. The key stakeholders had a chance to comment on the feasibility of the recommendations.		5
U.	**Quality assurance: Was the evaluation peer-reviewed? Was the quality of the draft report checked by the evaluation manager and peer reviewer prior to dissemination to stakeholders for comments? Did EO complete an assessment of the quality of the final report?**	The TOC and inception report were peer-reviewed.		4
V.	**Transparency: Were the draft ToR and evaluation report circulated to all key stakeholders for comments? Was the draft evaluation report sent directly to EO? Were all comments to the draft evaluation report sent directly to the EO and did EO share all comments with the commentators? Did the evaluator(s) prepare a response to all comments?**			6
W.	**Participatory approach: Was close communication to the EO and project maintained throughout the evaluation? Were evaluation findings, lessons and recommendations adequately communicated?**			6

X. **Independence: Was the final selection of the evaluator(s) made by EO? Were possible conflicts of interest of the selected evaluator(s) appraised?**			6
	OVERALL PROCESS RATING		5

Rating system for quality of evaluation reports

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1

The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.