



EVALUATION OF SELECT PROFOR ACTIVITIES
AND VALUE FOR MONEY METRICS

15th May 2015

Contents

Executive Summary	1
1. INTRODUCTION	4
2. EVALUATION METHODS AND ISSUES.....	5
Time allocation	5
Value for money work.....	5
Activity selection.....	5
Evaluation methods.....	6
Evaluation issues	7
3. ACTIVITY REPORTS.	9
Forests, Fragility and Conflict.....	9
The Role of Forests in Low-Carbon Growth Strategies – experience from three case studies (Brazil, Mexico, Indonesia).....	15
Biochar Systems for Smallholders in Developing Countries	20
Economic Growth and Drivers of Deforestation in the Congo Basin	27
Targeting Watershed Rehabilitation Investments in Turkey	33
.....	44
Impacts of Climate Change on Rural Landscapes in Brazil	44
Scaling up Renewable Charcoal Production in Brazil	49
4. OVERVIEW OF EVALUATION FINDINGS	53
Identification, design and appraisal	53
Implementation.....	54
Outputs and dissemination	55
Outcomes.....	55
Impact and sustainability	56
5. ASSESSING VALUE FOR MONEY	57

VFM in practice	57
VFM indicators	58
Proposed VFM scorecard.....	59
6. CONCLUSIONS, LESSONS AND RECOMMENDATIONS.....	61
Lessons learned.....	62
Recommendations	63
Boxes and Figures	
Figure 1: Results Chain: Forests, Fragility & Conflict:.....	14
Box 1: Selected Responses: Forests, Fragility & Conflict	15
Figure 2: Results Chain: The Role of Forests in Low-Carbon Growth Strategies.....	19
Figure 3: Results Chain – Biochar Systems for Smallholders in Developing Countries	26
Box 2: Selected responses – Biochar Systems for Smallholders in Developing Countries.....	26
Box 3: Selected responses – Economic Growth and Drivers of Deforestation in the Congo Basin.....	32
Figure 4: Results chain: Economic Growth and Drivers of Deforestation in the Congo Basin	33
Figure 5: Results Chain - Targeting Watershed Rehabilitation Investments in Turkey	37
Figure 6: Results chain: Lessons from Indian Watershed Management Projects.....	43
Box 4: Selected responses – Lesson from Indian Watershed Management Projects	44
Figure 7: Results Change - Impacts of Climate Change on Rural Landscapes in Brazil.....	48
Figure 8: Results Chain – Scaling up renewable charcoal production in Brazil	52
Box 5: Alternative definitions of Value for Money.....	57
Tables	
Table 1 : Web accessibility of Forests, Fragility and Conflict activity outputs	12
Table 2: Web accessibility of Biochar Systems for Smallholders in Developing Countries activity outputs.....	23
Table 3: Web accessibility of Economic Growth and Drivers of Deforestation in the Congo Basin activity outputs	29
Table 4: Web accessibility of Lessons from Indian Watershed Management Projects	40
Table 6: Outcome summary scores.....	56
Table 7: VFM scorecard example.....	60
Annexes	
A. Terms of Reference	
B. Evaluation framework	
C. People consulted	
D. Google search results	
E. Dissemination assessment: activity citation search	
F. PROFOR website trawl for presence and ease of finding products	
G. Esurvey questionnaire and results	

Abbreviations

AAA	Analytical and Advisory Assistance
ACCES	Africa Clean Cooking Energy Services
AFR	Africa Region
AID	Agency for International Development
BioCF	BioCarbon Fund
BLUM	Brazilian Land Use Model
CC	Climate Change
CDM	Clean Development Mechanism
CIFOR	Center for International Forestry
CMU	Country Management Unit
COMIFAC	Central African Forest Commission
COP	Conference of the Parties
CSA	Climate Smart Agriculture
DEM	Droplet Evaporation Method
DFID	Department for International Development
DPL	Development Policy Loan
DRC	Democratic Republic of the Congo
ECA	Europe and Central Asia Region
EMBRAPA	Empresa Brasileira de Pesquisa Agropecuária
ESMAP	Energy Sector Management Assistance Program
ESW	Economic and Sector Work
FAO	Food and Agriculture Organisation
FCPF	Forest Carbon Partnership Facility
FERN	Forests and the European Union Resource Network
FIP	Forest Investment Program
FLEGT	Forest Law Enforcement Governance and Trade
GACC	Global Alliance on Clean Cookstoves
GBEP	Global Bioenergy Partnership
GHG	Greenhouse gas
GLADA	Global Assessment of Land Degradation and Improvement
GP	Global Practice
GLOBIOM	Global Biosphere Management Model
GTF	Global Tracking Framework
IBI	International Biochar Initiative
ICONE	Institute for International Trade Negotiations
ICR	Implementation Completion Report
IUCN	International Union for the Conservation of Nature
IDA	International Development Association
IEG	Independent Evaluation Group
IEA	International Energy Agency
IIASA	International Institute for Applied Systems Analysis
INPE	National Institute for Space Research
IRENA	International Renewable Energy Agency
ISRIC	World Soil Information

KNOWFOR internationally	Improving the way knowledge is understood and used
KP	Knowledge Product
LCD	Low carbon development
LCG	Low Carbon Growth
LCR	Latin America and the Caribbean Group
M&E	Monitoring and Evaluation
MoU	Memorandum of Understanding
NGO	Non-Governmental Organisation
NDVI	Normalised Difference Vegetation Index
OECD	Organisation for Economic Co-operation and Development
ONFI	Office National des Forets International
PROFOR	Program on Forests
REC	Renewable Energy Certificates
R-PP	Readiness Preparation Proposal
REDD Degradation	Reducing Emissions from Deforestation and Forest
REN21	Renewable Energy Policy network for the 21 st Century
SAR	South Asia Region
TA	Technical Assistance
TFESSD Development	Trust Fund for Environmentally And Socially Sustainable
TTL	Task team leader
UNDP	United Nations Development Program
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNICAMP	Universidade Estadual de Campinas
UNODC	United Nations Office on Drugs and Crime
VFM	Value for money
WB	World Bank
WDR	World Development Report

Executive Summary

This is a report of an evaluation consultancy commissioned by the PROFOR secretariat based in the World Bank. It had three main objectives:

- To assess the outcomes and potential impacts of select PROFOR activities relating to cross-sectoral policy coordination
- To distil lessons about key factors that led to success (or failure) of the select activities to inform future engagement; and
- To identify practical metrics and means, including value for money indicators, to assess the results of PROFOR work moving forward.

On the advice of the PROFOR Secretariat, eight activities were purposively selected for their potential learning value. They were not intended to be representative of the cross-sectoral portfolio.

Thematic Area	Activity
Cross Sectoral	Economic Growth and Drivers of Deforestation in the Congo Basin
Cross Sectoral	Biochar Systems for Smallholders in Developing Countries
Cross Sectoral	Impacts of Climate Change on Rural Landscapes in Brazil
Livelihoods	Scaling up Renewable Charcoal Production in Brazil
Livelihoods	Targeting Watershed Rehabilitation Investments In Turkey
Cross Sectoral	The Role of Forests in Low Carbon Growth Strategies
Livelihoods	Lessons From Indian Watershed Management Projects
Livelihoods	Forests, Fragility and Conflict

All of the eight activities were relevant, and most were timely and important. All produced interesting and potentially useful results, as well as positive outcomes. Five of the eight activities have produced significant outcomes in one or more of the following areas: influencing programmes, policies or dialogue; advancing knowledge/understanding; and developing new tools and methods. It is too early to assess possible development impacts.

PROFOR recognises that it needs to improve the way in which it measures and reports on its value for money (VFM). This is not a simple issue. There are a variety of definitions and approaches to measuring VFM, and no examples have been found of knowledge/research programmes where VFM is being successfully measured. However, it is generally accepted that VFM is a judgement that needs to be based on multiple indicators at different levels. It is very unlikely that it can be reduced to a single indicator in the case of programmes like PROFOR.

The solution proposed for PROFOR is innovative but relatively simple: a VFM Scorecard. Tracking a few key outcome-level indicators (or close proxies) over the time would allow PROFOR to answer the question: is VFM improving? There would be merit in piloting this approach with the other partners in KNOWFOR as part of the wider initiative to improve monitoring and evaluation.

Lessons learned

The time and evidence available for this evaluation has been limited, and the number of activities evaluated has been small. Caution needs to be exercised in drawing lessons and recommendations from a study of this nature. With that proviso, several conditions appear to lead to better outcomes in the activities evaluated:

- The use of highly credible external partners that have strong networks that extend to practitioners.
- The use of high quality consultants with experience of working within the World Bank and other involved national/international institutions.
- An internal champion and manager in post from activity initiation to uptake and with the connections to operational activities and networks within the Bank to assure uptake of results.
- In the case of national activities, clear demand/ownership by the government and country management unit (CMU), and a definite operational use for the outputs.
- Clear impact pathways identified and developed at the outset, including identification of boundary partners and processes to ensure they are engaged from the beginning of the activity, and a clear identification of target audiences beyond the immediate World Bank actors.
- Timely interim and final reports, and the effective use of workshops at World Bank, national, regional, international level.

The conditions associated with a reduction in performance were the opposite of these. Those activities that lacked one or more of the positive conditions listed above, even the more successful ones, suffered from diminished uptake, outcomes or sustainability. The lack of strong external partners, lower quality consultants, changes in the TTL responsible, unclear target audiences, and late or non-existent reports were all associated with reduced performance in several of the activities evaluated.

Recommendations

The evaluators make the following recommendations. PROFOR should:

- review the new management and M&E procedures for PROFOR-supported activities, including document storage and retrieval, in the light of this report;
- ensure that a short Briefing Note is produced, either as part of the activity or by the secretariat, for all the activities it supports within six months of project completion. There would be particular value in a Briefing Note for the Forests, Fragility and Conflict activity.

- consider setting up a designated follow-up fund which could be used to complete or expand reporting and communication activities at the end of the activity.
- ensure that special management attention is given to activities where the TTL is changing or where the outputs are more than six months overdue.
- Develop and pilot the VFM scorecard in coordination with its KNOWFOR partners.
- Consider a different approach to the external evaluation of PROFOR activities. Periodic in-depth evaluations of the complete portfolio of activities (or thematic portfolios) may be more useful than this type of selective activity evaluation.

1. INTRODUCTION

The Program on Forests (PROFOR) is a multi-donor collaborative partnership that aims to strengthen forests' contribution to poverty reduction, sustainable economic development, and the protection of global and local environmental values (www.profor.info). The purpose of PROFOR is to contribute to building the capacity of institutions and stakeholders in forest policy processes to address these challenges more effectively.

This is a report of an evaluation consultancy commissioned by the PROFOR secretariat based in the World Bank. The Terms of Reference for the assignment are at Annex A. It had three main objectives

- To assess the outcomes and potential impacts of select PROFOR activities relating to cross-sectoral policy coordination;
- To distill lessons about key factors that led to success (or failure) of the select activities to inform future engagement; and
- To identify practical metrics and means, including value for money indicators, to assess the results of PROFOR work moving forward.

The cross-sectoral theme is one of four themes addressed by PROFOR¹. PROFOR activities relating to the cross-sectoral theme have addressed opportunities and threats to forests from other sectors, sought to increase policy coherence, and developed tools to evaluate and report on impacts of other sectoral developments. PROFOR activities marked as primarily cross-sectoral, account for 22% of 2014 commitments.

This evaluation is the fourth in a series of independent activity evaluations commissioned by the PROFOR secretariat since 2011. The secretariat is in the process of introducing an improved monitoring and evaluation system for PROFOR as a whole. The findings reported here on practical value for money metrics are intended to complement that wider work.

The evaluation approach used is outlined and reviewed in Section 2. While the evaluation budget did not allow for any fieldwork, a visit was made to Washington DC in January 2015 to discuss the evaluation with the secretariat and available World Bank task managers. A list of the people consulted in person, by telephone, or by email is at Annex C. At the request of a number of interviewees, no findings are attributed to specific individuals. Responsibility for the views expressed in this report rests with the evaluation consultants alone.

Section 3 contains the main part of the report: individual evaluations of eight selected PROFOR-supported cross-sectoral activities. Section 4 contains an overview based on these eight evaluations. Section 5 contains the findings relating to the value for money task. Conclusions, lessons and recommendations can be found in Section 6.

¹ The other three themes are Financing Sustainable Forest Management, Governance and Livelihoods.

2. EVALUATION METHODS AND ISSUES

This section outlines the process followed during the evaluation; explains the eventual focus of the report; and highlights some of the evaluation issues encountered.

Time allocation

The assignment divided into two main components with different time allocations: 1) an evaluation of select PROFOR activities relating to the theme of cross-sectoral policy coordination (80% of time), and 2) the identification of appropriate metrics and means to assess PROFOR activities more generally (20% of time). However, the total number of days available - four days per activity - was still extremely limited

Value for money work

One of the objectives of the consultancy was 'to identify practical metrics and means, including value for money indicators that PROFOR might use to assess its effectiveness moving forward'. After discussion with the secretariat it was agreed that the focus of this work should be on value for money (VFM), rather than on the issue of performance measurement and performance indicators more generally. These latter topics are already well covered by the work already in progress with support from KNOWFOR². PROFOR was particularly interested in possible value for money metrics that could complement the other changes to the monitoring and evaluation system that are already under development through KNOWFOR..

The initial expectation was that, given the high profile accorded to VFM in donor circles, there would be many examples of VFM approaches in use in similar research/policy programmes that could be drawn on in designing an approach for PROFOR. This is not the case. VFM approaches are more talked about than implemented. The approach suggested for PROFOR in Section 5 is therefore original rather than based on the experience of other programmes.

Activity selection

Activities supported by PROFOR are marked by main and secondary thematic area. 24 of the 104 PROFOR-supported projects completed in 2010-2013 or active in 2014 were marked as cross-sectoral. As shown in Annex D, these cover a wide spread of geographical areas, funding types and knowledge product types.

The PROFOR secretariat had drawn up a shortlist of 16 high, medium and low priority activities that might be evaluated. It emphasised that the primary function of this evaluation was learning rather than accountability. The main objective was to learn and share ex post impact stories. Activity selection did not for this reason need to be representative of what PROFOR has supported related to the theme of cross-sectoral policy coordination, nor confined to those marked as primarily cross-sectoral.

² KNOWFOR is DFID funded programme named 'Improving the way knowledge on forests is understood and used internationally'. The three project partners are PROFOR, CIFOR and IUCN.

After extensive consultation and discussion with the secretariat it was agreed that 8 of the activities, amongst those originally identified by the secretariat, should be evaluated. The following four criteria were agreed to be used to determine the selection:

- Activities identified by the Secretariat as projects of significant interest/potential impact
- Part of a thematic cluster (e.g. the two activities focused on watersheds)
- % PROFOR funding to try to understand the effects this might have in terms of PROFOR ownership over the activity as well as PROFOR's role
- The relative success of the activity - selecting activities that were more and less successful to improve the opportunities to learn lessons on what works well

The final list of the eight activities evaluated by the team is as follows:

Thematic Area	Activity	Region
Cross Sectoral	Economic Growth and Drivers of Deforestation in the Congo Basin	AFR
Cross Sectoral	Biochar Systems for Smallholders in Developing Countries	LCR
Cross Sectoral	Impacts of Climate Change on Rural Landscapes in Brazil	LCR
Livelihoods	Scaling up Renewable Charcoal Production in Brazil	LCR
Livelihoods	Targeting Watershed Rehabilitation Investments In Turkey	ECA
Cross Sectoral	The Role of Forests in Low Carbon Growth Strategies	Global
Livelihoods	Lessons From Indian Watershed Management Projects	SAR
Livelihoods	Forests, Fragility and Conflict	Global

Language was a significant issue for the evaluation because of the number of activities in French- and Portuguese-speaking countries. An additional highly qualified French-speaking consultant was employed for one of the projects (Drivers of Deforestation in the Congo Basin) using funds reallocated from the budgeted travel expenses. This was a considerable help, although getting people to respond was still very time-consuming and problematic.

Evaluation methods

Work on the evaluation of the activities proceeded in four stages:

- Contact with the PROFOR secretariat to identify/confirm key documents and informants;
- Review of project documents and outputs;
- Review of presence of PROFOR products through Google search, scholar and citation search, as well as an assessment of visibility on PROFOR website
- Telephone and email interviews with identified informants;

- Analysis and write-up.

In the event it took far longer than expected to get responses from some of the key informants, including from some of the task managers. In most cases, multiple emails were required to schedule times for interviews. Some of this delay reflects the heavy travel schedules of some of the informants. In some cases, it was not possible to obtain interviews, some informants either did not reply at all or indicated that they had no interest to respond as the work was too long ago and they did not feel they had anything to contribute. As a consequence, the number of interviews for some of the activities conducted is less than expected or desirable.

The team developed an initial evaluation framework to guide the document review and telephone interviews. This is attached at Annex B.

An e-survey was attempted for one of the activities: Drivers of Deforestation in the Congo Basin. Survey respondents were participants from a high-level workshop in Kinshasa in 2013. The eSurvey questions, provided in French to participants, were based on PROFOR activities in the Congo Basin, with additional introductory questions establishing the characteristics of the respondent. It had been hoped that the survey results could have been used to triangulate information collected from the interviews and the literature review, and to gather views from a wider range of stakeholders. However, responses were received from only 4 of the 64 people contacted (7%) and very little additional information was gained. It is not clear why this response was so low, possibly some of the email addresses listed were not complete and in other cases were difficult to read. See Annex G for ESURVEY questionnaire and results.

The team used a similar scoring method to that employed by the earlier impact evaluations.³ Outcomes were assessed according to the magnitude of their contribution to date (significant, moderate, some, or not applicable) in four areas: influencing policies or policy dialogue; advancing knowledge/understanding; developing new tools and methods; and strengthening networks.

The issue of how PROFOR should assess value for money (VFM) is covered in the penultimate section. In order to see what was possible, a short assessment of VFM is included for each of the activities evaluated. This is a subjective assessment against the following definition of VFM: '*the relationship between the money that enters the chain (the costs) and the resulting outcomes and impact*'⁴.

Evaluation issues

A number of factors have limited the quality of the activity evaluations, and particularly the extent to which it is possible to identify outcomes with any degree of certainty. Two of these factors are unavoidable:

- In many cases, PROFOR has made a small contribution to a relatively small knowledge activity that is itself just part of a much longer and wider knowledge or operational process. In 3 cases the activity would have happened, or was happening, anyway. Expecting to be able to identify the

³ An Evaluation of the Impacts of Selected Activities Supported by the Program on Forests. Wells et al (June 2011). This used a similar rating of impacts: significant, moderate, and minor. As in this evaluation, this is a simple, subjective three-level rating: high, medium or low.

⁴ Guidance on measuring and maximising value for money in social transfer programmes – second edition. DFID (2013)

specific outcomes and added value of PROFOR's contribution is therefore not possible in most cases.

- The development impacts of the individual PROFOR activities on poverty reduction, biodiversity conservation, etc. cannot be assessed. This is either because the PROFOR activities are too recent to have done more than influence a new loan or practice which has yet to deliver any impact and/or because any eventual impact is too diffuse and distant to be attributed with any certainty to one small knowledge output among many
- A number of other factors have also constrained the evaluation:
 - The limited documentation on most of the activities. The lack of an effective central PROFOR system for storing the key documents for each activity (e.g. decision notes and outputs) has been problematic.
 - Arranging interviews with, and obtaining information from, key informants (including task team leaders) has been much more difficult and time consuming than expected. In several cases, key informants have either not responded or have said they are not prepared to contribute.
 - The limited time available for the assessment of each activity⁵.

Finally, it is important to bear in mind that most of this report is based on the evaluation of just eight activities. These activities were not selected to be representative of activities related to the theme of cross-sectoral policy coordination, and they are certainly not representative of PROFOR-supported activities more generally. The small, non-representative sample, and the limited number of independent informants for most of the activities, makes it difficult and potentially misleading to draw conclusions or lessons with any degree of certainty.

⁵ 4 days to identify, establish contact and schedule telephone interviews with key informants along the results chain, review all relevant background literature, prepare detailed questions, conduct and write-up the interviews, correspond to clarify additional points and follow-up other informants, and write the review of the activity drawing on primary and secondary sources.

3. ACTIVITY REPORTS.

The activity reports each follow the same structure to provide a framework for assessment of the activity from the context when it was identified through to the outcomes and impacts. It develops a results chain for each activity to try to identify what was expected by the activity lead and what was finally delivered. The structure for each report is as follows:

- Description of objectives
- Background and context
- Identification, design and appraisal issues
- Implementation
- Outputs
- Dissemination and its effectiveness (using various web-based searches)
- Outcomes
- Impacts and sustainability
- Value for money
- Conclusions
- Lessons and issues

Forests, Fragility and Conflict

Partners	None
Consultants	Emily Harwell, Art Blundell, Doug Farah
Beneficiaries	WDR task team
Date of concept note preparation	January 2010
Duration	January 2010 to September 2010 extended to June 2011
Type of funding	Strategic
Type of knowledge product	Knowledge Product
Total cost	Total cost: \$195,844 PROFOR: \$166,451 World Bank Administrative Budget: \$29,393 PROFOR contribution 85%
Location/scale	Global
WB Task Team Leader	Peter Dewees
OBJECTIVES	
The objectives were focused on: 1) critical review and synthesis of key issues and post-conflict policies associated with forests, fragility and conflict; and 2) development of guidance on how these issues might be addressed in future policy and lending discussions.	
BACKGROUND AND CONTEXT	
At the time there was growing interest in the relationship between exploitation of natural resources, conflict and fragile states and in particular how these relationships affect those states emerging from conflict. Paul Collier's influential book published in 2010 captured many of these	

issues⁶. This was also reflected in an important study undertaken by UNODC (published in 2010) that detailed the transnational crime networks operating across a range of commodities including timber⁷. The demand for this piece of work was identified by the World Bank External Advisory Group on Forests and recommended to PROFOR to take it forward using the World Development Report (WDR) for 2011 (focused on conflict, security and development) as the main audience for the outcomes from the study.

The WDR team early on in their work looked at some of the stresses countries were facing when emerging from fragility to see how it might be possible to make an exit from conflict that lasts. Most exits are temporary and relapse; some of this is the result of the types of economic activity in conflict countries. Conflict is both fuelled and financed by informal economies and transnational crime networks. The WDR team observed from their analyses the role of forests and started to talk with the forest team in the Bank. At this time those involved with conflict did not really discuss forests, discussion of illicit natural resource flows focused mainly on oil.

At the same time this work was being developed forestry in the Bank was under intense scrutiny from an Inspection Panel looking into World Bank support to forestry in Liberia and a critical US Congress review of US appropriation to AID which was under threat because of questions about support to forestry. Internal audiences for this study were therefore limited by this difficult context for forestry.

IDENTIFICATION, DESIGN AND APPRAISAL

The proposal for this work was first discussed with the co-directors of the WDR who considered the background papers and synthesis report to be an important contribution to the report. The consultants engaged to lead the study worked directly with the WDR team, a member from which acted as one of the peer reviewers, and was consulted as part of this assessment.

IMPLEMENTATION

The work was conducted in a highly accelerated time-frame to fit with the needs of the WDR. The lead author was expected to start work in a very short period of time after being contacted to do the work with a short time schedule in which to complete the work. This included finalising the concept note, including all the internal review and decision meetings, as well as recruiting 5 authors to write the background papers, edit their papers plus write a synthesis paper, liaise with the WDR team and have drafts completed. In effect there were just three months to complete the work. The tight timeline and modest budget was a significant problem for recruiting quality authors. Consequently several of the papers were of poor quality and were not published. Despite these problems, those papers that were published were of a very high quality. The process followed by PROFOR was valued by the WDR team as the standard World Bank process for analytical work was followed completely but all within a compressed time-frame. This rigorous process meant that the final products were of high quality which was not the case for all the products produced for the WDR that did not go through such a robust process of review.

OUTPUTS

The activity produced a series of products: three background papers plus an overall synthesis and video footage of a briefing from the lead author, and some related field notes:

- Impact of conflict and fragility on forests (focus on cross sectoral post-conflict issues)
- Mechanisms and channels of financial flows from forest extraction to state and non-state belligerents – facilitate or prolong conflict
- Characteristics of fragile states to be focus of reform in post-conflict interventions to improve protection of forests and forest-based livelihoods and mitigate further conflict

⁶ Collier P 2010 The plundered planet: how to reconcile prosperity with nature. Allen Lane, London.

⁷ http://www.unodc.org/documents/data-and-analysis/tocta/TOCTA_Report_2010_low_res.pdf

These three studies were brought together into one synthesised report and published by PROFOR in 2011.

Although there is not much evidence of substantial use of the material from the PROFOR funded work in the WDR it was cited twice, and the results were presented to the WDR team to inform their writing:

- Blundell, Arthur G. 2010. "Forests and Conflict: The Financial Flows That Fuel War." Background paper for the WDR 2011. (footnote 57, 66 on Liberia)
- Harwell, Emily. 2010. "Forests in Fragile and Conflict-Affected States." Background paper for the WDR 2011. (footnote 92)

DISSEMINATION

Use of seminars

Preliminary results from this work were presented at several international workshops.⁸ At the World Bank a public panel was held to discuss the background papers with the WDR team. The papers were also available on the WDR website.

The lead consultants have personally used the material from the study to inform discussions at conferences, including a conference on REDD in Fragile States (hosted by Centre d'Analyse Strategique in 2010), and as an input to the 'conflict and fragile states' thematic group convened to support the High Level Panel on Post-2015 Millennium goals. The report findings were extensively built into the final document produced by the High Level Panel⁹. The conceptual framework developed by the consultants has been used in on-going work to inform policy advice to the US government on ways to look at different types of crimes and relationships to transnational crime.

Publication as a PROFOR product

Initially it was thought that this study could be produced as a World Bank publication. This would have taken advantage of their extensive distribution to libraries, research institutions and the consequent high profile. The initial approach to the publishers elicited a positive response to what they considered to be an innovative piece of work. However, any World Bank publication needs to have country clearance from all countries that are referenced in that publication. It would have been difficult to get all these clearances without removing much of the material, as some was quite sensitive. This would have reduced its value, and in the end it was published as a PROFOR document.

Web presence

Three different searches for accessibility and availability of the final study were conducted: 1) PROFOR website; 2) Google scholar; and 3) a general Google web search and Google Books search. The full results of these three searches are provided in the Annexes. The table below summarises the results. Although the study is easily searchable on a general Google search, it is very difficult to find through Google scholar and Google books unless the word fragility is included in the keyword search. The main study is not cited in Google Scholar without the right keyword, otherwise only the background study is listed. Citations are limited given this study was produced in 2011. This is probably due in part to the difficulty of searching for it. The PROFOR webpage for this activity has not been updated since 2010, and the background papers cannot be accessed from the link.

⁸ 'Reviewing international responses to transnational crime' UNODC Vienna April 2010

⁹ http://www.unk.org/en/development/desa/policy/untaskteam_undf/HLP%20P2015%20Report.pdf

Table 1 : Web accessibility of Forests, Fragility and Conflict activity outputs

Product	Date of Publication	Google search	Google Books	Google Scholar citations	PROFOR
Forests, fragility and conflict	June 2011	p.1: 1 st reference – indicating good accessibility to the report if the full title is known	No reference p.1 (using keywords Forests fragile states conflict) p.1: 1 st reference (using key word fragility)	p.1 second reference 7 citations but to draft background study p.1 second reference – 3 citations, final study only cited if fragility is used as a keyword	Link available on knowledge page Background papers not available from link Last update 2011

OUTCOMES

One of the strengths of the work overall is that it cuts across the technical silos in development and post conflict intervention practice. The study consultants found during their work within the Bank how little people talk to others in the institution or are aware of the relevance of fields of practice outside their own teams or departments. One of the report's central tenets is that it is critical to look at the causal elements and related impacts across disciplines – that financial crime is often linked to forest use with impacts on community livelihoods and poverty, and that specific economic programmes for demobilised combatants can have direct impacts on forests and those impacts can be strongly gendered. "Yet those working on one of these topics not only do not talk to those working on any of the other related fields, but do not see the reason why they should. There is a recent exception to this where the financial crime and stolen assets recovery staff have been in communication with the forestry team on issues related to illegal logging" (interview with study consultant). With the newly developed incentives for working across global practice groups, it is to be hoped that PROFOR can through its work foster these types of cross-connections that can more directly impact on poverty reduction and positive gendered outcomes.

The final study is a useful reference volume that synthesised the ideas more concretely into a field of practice. However, despite an active communications strategy to disseminate it widely, it has had limited reach to some of its more obvious client audiences such as the FLEGT community¹⁰. Contacting a few key players in this community to see whether they had either heard of the study or read it revealed that none had and all when being made aware of it were very interested in its content, and indicated it would have been useful to their work at the time. It was not only the PROFOR funded work that did not have the reach that was expected, the WDR also did not reach all its audiences, in particular practitioners.

Given the current resurgence in interest in the linkages between natural resources, transnational crime, conflict and fragility, it may now be timely to re-look at this issue within the World Bank and across global practice groups Box 1. As the evidence of use of the WDR 2011 by Global Witness indicates there are a series of important entry-points that could be used further to embed understanding of the role of natural resources particularly forests in strategic discussions.

¹⁰ outreach during evaluation to a few key members of the FLEGT community (FERN, Global Witness, Chatham House) who would be expected clients for the work. However, during these consultations it was also clear that the WDR 2011 itself did not get the level of uptake that would have been expected at the time. More recently it has been taken forward in discussions by Global Witness (looking at the connections between natural resources and conflict) with the National Defense University as well as with the Peacekeeping and Stability Operations Institute at the US Army War College (interview with Global Witness)

OUTCOME RATINGS				
	Influencing programmes, policies or policy dialogue	Advancing knowledge /understanding	Developing new tools and methods	Strengthening networks
Rating	Some	Moderate	n/a	n/a
IMPACTS AND SUSTAINABILITY				
<p>Despite the discussions held inside the Bank that attracted considerable interest, the background studies produced for the WDR and synthesised as one report have had little traction either inside or outside the Bank. Fragile states are an important part of the Bank's agenda (the IDA 17 replenishment focuses on addressing drivers of fragility and conflict¹¹) but there is little work on forests and fragile states and even the little there was has since disappeared. As the completion report for this activity highlights there were few people with the skills or interest inside the Bank to manage this activity and as a result there was no further development of PROFOR work programme on these issues. The report indicates that there are other institutions better placed than PROFOR or the World Bank to take these issues forward, but there was no follow-up work to do this and no indication which institutions this might be.</p> <p>The completion report provides no evidence for impact from the work, and there is no evidence to indicate that there has been any sustainability of the work either inside or outside the Bank, apart from that directly taken forward by those involved with the study. However, it is clear from the interviews held that the individuals involved in this work have been able to take it forward into their own areas of work. It has also been picked up by Global Witness through using the WDR 2011 as a focus for linking conflict and natural resources, but the reach was certainly limited by the failure to explore other audiences apart from the WDR.</p> <p>Although it is often necessary to work with consultants to deliver the activity, the choice of consultants is a critical element of the effectiveness of the work. For this study focused on an internal process in the Bank that leads to an external product, the consultants although highly experienced and credible did not have the knowledge of the World Bank nor the internal positioning to be able to ensure that lessons and understanding could be more carefully embedded into the system and sustained beyond the moment of the WDR production. As a consequence there was limited internal transmission of learning from this work to World Bank staff (beyond the WDR team) and it has had limited lasting effects since the production of the WDR. One solution might be to require an explicit focus in the ToR for consultants on the processes to be used with the TTL to ensure effective outreach within the WB, and that this be designed into the work from the outset.</p>				
VALUE FOR MONEY				
<p>This was a relatively high cost activity for PROFOR. The work would not have been carried out without PROFOR support and the information on forests and fragility would not have been incorporated into the WDR. Although this was the primary audience for the studies, the limited reference to the PROFOR funded work in the WDR means that the actual effect of the work is also quite limited. The influence of the work inside the Bank has also been limited. Since other audiences for the study were not clearly targeted the VFM was not maximised.</p>				
CONCLUSIONS				
<p>The work was timely and important, and potentially the WDR provided an influential arena for this work. However, there was limited uptake of the results of the work in the WDR, and the WDR report itself did not have major influence either inside or outside the World Bank. It is only</p>				

¹¹ http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/06/19/000442464_20130619114308/Rendered/PDF/785550BR0IDA0S00Box0377330B00QU090.pdf

more recently that actors such as Global Witness have been able to take forward the use of the WDR. The lack of knowledge about the PROFOR funded study amongst some of the audiences that would most have benefited from it, is a limitation of this work.

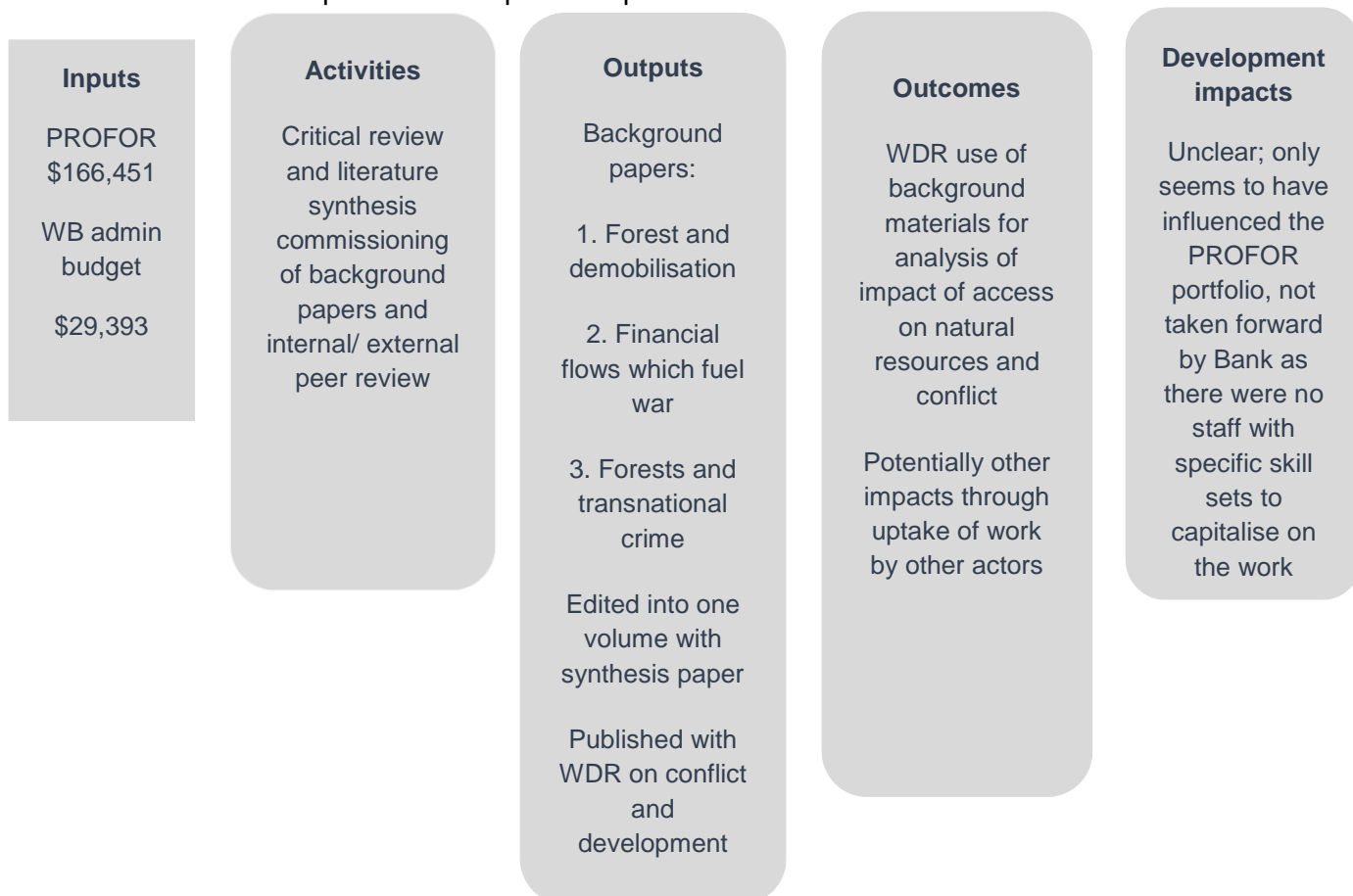
LESSONS AND ISSUES

Limited reach: the limited focus of this study on the WDR as the primary audience did restrict its reach. As other studies in this evaluation have shown, use of strategies that map out and identify those audiences to be engaged with and influenced from the outset are more effective in their reach, particularly where they focus on the delivery of interim products that share initial knowledge and build understanding rather than waiting until the end of the work and production of the final study. Given the short time frame this work had to be completed within, there was a need for follow-on work to share the synthesis study widely outside the Bank in key forums. This was the only way in which it could have reached wider audiences. At the time one critical audience was the FLEGT community and two good forums to reach this community were the Illegal Logging Update workshops hosted by Chatham House bi-annually and the FLEGT week held in Brussels annually.

Recommendation: For this particular piece of work, there is still much interest in the issue and it is an area that PROFOR may wish to revisit to see if it is possible to produce a short briefing note from the study and target it to those audiences that might be interested in the longer study. This could include work to review how best to operationalize the understanding within the Bank as well as outside.

Figure 1: Results Chain: Forests, Fragility & Conflict:

Illustrates the intended results of the work as described at concept note stage and assessment of impact from completion report



Box 1: Selected Responses: Forests, Fragility & Conflict

Some highlights of how WDR2011 has been used for Global Witness work:

All of these examples draw on the relationships with natural resources:

- Used to provide basis for conflict and natural resource fact sheets produced by Global Witness
- Used to inform a panel discussion on natural resources and US national security for Global Witness' 20th Anniversary event in Washington, DC in November.
- Support to a project with Transparency International's Defence and Security Program to provide guidance to military leaders and staffs on conducting military stabilization operations in highly corrupt environments.
- WDR2011 formed a significant baseline for handbook, see particular elements on natural resource linkages. (Link to handbook: <http://www.ti-defence.org/publications/dsp-pubs/307-corruption-threats-and-international-missions.html>)
- Three-times-a-year talk on resource curse and cycles of violence issues to about 100 rising Lt Colonels and Colonels in the US military reserves, and WDR2011 forms a basis of that talk (and is recommended reading at the end of the talk).
- There is a small community of CSOs who have begun to talk about how the World Bank could assess and take into account conflict, and WDR2011 has been a foundation for those discussions.
- WDR2011 was a major item of discussion at a recent roundtable at the US Army War College's Peacekeeping and Stability Operations Institute (PKSOI) in November on how to include corruption and economic development-related issues in the next round of Joint Publication 3-07 Stability Operations doctrine.

The Role of Forests in Low-Carbon Growth Strategies – experience from three case studies (Brazil, Mexico, Indonesia)

Partners	None
Consultants	
Beneficiaries	
Duration	November 2011 – March 2013
Type of funding	Just-in-time
Type of knowledge product	Technical Assistance
Total cost	PROFOR \$50,000 ESMAP \$ 5,000 TOTAL \$ 55,000
Location/scale	Global
WB Task Team Leader	Klas Sander
OBJECTIVES	

To develop a **policy brief** analysing the role of forests and forest management for developing and implementing low-carbon growth strategies, including financing options related to low-carbon growth. While the policy brief will build on experience and data analyses already undertaken in key pilot countries (Mexico, Indonesia, Brazil), it is explicitly intended to provide guidance on the integration of forestry in low-carbon growth strategies at a general level, thus, creating value-added beyond the case study examples. [Concept Note]

BACKGROUND AND CONTEXT

Many countries are seeking to identify opportunities and related financial, technical, and policy requirements to move towards a low-carbon growth path. With the support of ESMAP, selected pilot countries have initiated country-specific studies to assess their development goals and priorities, in conjunction with greenhouse gas (GHG) mitigation opportunities, and examine the additional costs and benefits of lower carbon growth. Collectively, these studies have generated a wealth of knowledge that can be used beyond the pilot countries to create low-carbon pathways and to identify GHG reduction investments. For some of these pilot countries, addressing issues in the forest and land-use sector play an important role for developing low-carbon growth strategies. Because results are provided in an aggregate manner, a detailed analysis of the forestry and land-use sector have not been separately presented. However, such an analysis would provide important information and guidance to develop low-carbon growth strategies for many other countries where forestry and land-use change are key GHG emissions sources. As one of the most important implementing institutions of new programs promoting sustainable forest management for GHG mitigation, such knowledge will be especially important for guiding World Bank operations, country dialogue and investment decisions, especially with regard to carbon related forest management (FCPF, FIP, BioCF, UN-REDD, etc.) [Concept Note]

IDENTIFICATION, DESIGN AND APPRAISAL

With the support of ESMAP, five selected pilot countries had initiated country-specific studies to assess their development goals and priorities, in conjunction with GHG mitigation opportunities, and examine the additional costs and benefits of lower carbon growth. For some of these pilot countries (Mexico, Indonesia, Brazil), addressing issues in the forest and land-use sector play an important role for developing low-carbon growth strategies. Because results are provided in an aggregate manner, a detailed analysis of the forestry and land-use sector had not been separately presented.

The activity originated from discussions between the TTL for Low Carbon Development and Klas Sander. The idea was then discussed with PROFOR. The decision notes could not be found.

IMPLEMENTATION

Implementation took longer than planned. It was originally planned as a 6-month project to be completed by July 2011. Contracting the consultants took a long time. The draft report produced by the consultants contained many data/information gaps so the TTL decided to take over the report. This led to further delay. A draft report was delivered to ESMAP in July 2012 and the grant was completed in March 2013 (26 months after approval). A draft final report dated 2013 was circulated for review. A final version has not yet been produced.

OUTPUTS

A final report (policy brief) has not yet been produced. The draft report covers the three potential contributions of forests to low carbon development (LCD): reducing emissions from forest degradation and deforestation; enhancing the carbon sequestration potential of forests; and material substitution using wood for replacing fossil fuel intensive materials, including biomass energy in lieu of fossil fuels. The PROFOR activity added most to the knowledge about the last of these: material substitution. The work in this area was quite new and advanced the frontier of knowledge. The activity contributed less to the knowledge about mitigation and sequestration which were already better known and documented.

The material has been used in a number of seminar presentations within and outside the World Bank (see section below).

DISSEMINATION

The work has not been disseminated in the form of a report. It has been disseminated through presentations and informal dialogue with other forestry colleagues in the World Bank. According to the TTL this type of dissemination through process and dialogue is more effective than a report.

The material was used in a number of presentations. For example:

- The Role of Forests in a Green Economy - 21st. Session of the Committee on Forests & 3rd. World Forestry Week, FAO, Rome, 24-26 September 2012

OUTCOMES

The policy brief was intended to serve decision makers and operational TTLs in developing and implementing forestry-based low-carbon growth strategies for countries with significant GHG emissions from the forestry sector. The analysis would provide important information and guidance to develop low-carbon growth strategies for many other countries where forestry and land-use change are key GHG emissions sources. Such knowledge was seen as being especially important for guiding World Bank operations, country dialogue and investment decisions, especially with regard to carbon related forest management (FCPF, FIP, BioCF, UN-REDD, etc.).

The TTL for Bhutan is reported to have drawn on this work in contributing to the Green Growth Strategy for that country. No other specific evidence of the influence intended has been found.

The work has enabled the TTL concerned to build capacity on the subject matter and to broaden the dialogue on wood energy. According to the TTL, 'the work has certainly played an instrumental role in the broader network of advancing policy dialogue and technical discussion'. It has steadily contributed to and fed into strategic and operational work at various levels. It has catalysed an increasing portfolio of tasks and assignments for the TTL concerned including other World Bank strategic and knowledge work, World Bank operational work, and international dialogue. These include:

World Bank Strategic and Knowledge Work:

- a) In 2011, the TTL was tasked to be a lead author of a regional strategic study for Africa on wood energy titled "Wood-Based Biomass Energy Development for Sub-Saharan Africa: Issues and Approaches" mandated by the World Bank AFR Energy Group. This work laid the foundation for subsequent work on the wood energy supply chain, complementing the energy sector work on demand side (clean cookstoves).
- b) the TTL contributed to the Africa Energy Group / ESMAP team developing and implementing the Africa Clean Cooking Energy Services (ACCES) initiative. An "Africa Clean and Improved Cooking" landscape review study is about to be published. The TTL was responsible for the biomass energy supply chapter.
- c) the TTL is currently contributing to the World Bank led work on the 2nd Global Tracking Framework (GTF) report under the UN Sustainable Energy for All initiative. This 2nd report will be published later in 2015 and will have a subsection on "Sustainability" with a focus on bioenergy that the TTL was asked to lead (in collaboration with other international institutions, such as IEA, IRENA, UNEP, FAO, REN21, and others).

World Bank Operational Work:

- d) the TTL contributed to preparatory work for the Democratic Republic of Congo Forest Investment Program, which focuses largely on wood energy supply chain aspects, and facilitated collaboration between Environment and Energy units as regards promoting clean cooking technology.
- e) the TTL has been asked to serve in advisory roles for the Energy Sector Management Assistance Program (ESMAP) for the Renewable Energy Resource Mapping initiative component on biomass energy mapping (currently carried out in Pakistan as the first country). The TTL has contributed to ESMAP training sessions on renewable energy and led sessions on biomass energy.
- f) the TTL is part of a team that is in the process of developing biomass energy activities in Haiti with the objective of building an operational investment program cutting across energy, environment, and agricultural sectors (and possibly others).

International Dialogue:

- g) the TTL has been invited to serve in an advisory function on the recently established UNECE Wood Energy Expert group that has the objective to enhance data and knowledge on wood energy in the UNECE region.
- h) The Global Bioenergy Partnership (GBEP) invited the TTL to speak on biomass energy related issues and WB work and to contribute to establishing a work track on wood-based biomass energy under GBEP program of work.
- i) the TTL has cooperated closely with the UN Foundation's Global Alliance on Clean Cookstoves (GACC) on biomass energy supply chain and was asked to serve as technical peer reviewer on their global assessment of biomass supply-demand modelling and other work.

OUTCOME RATINGS

	Influencing programmes, policies or policy dialogue	Advancing knowledge /understanding	Developing new tools and methods	Strengthening networks
Rating	Some	Some	n/a	n/a

IMPACTS AND SUSTAINABILITY

There is no evidence of development impacts. The lack of a published final report may have limited the impact and sustainability of this activity over and above that achievable via tacit knowledge.

VALUE FOR MONEY

This was a low-cost activity (\$55,000). In the opinion of the TTL, it is doubtful whether the work would have been carried out without PROFOR support. ESMAP would probably not have funded the work by itself. However, there is not yet a final report and the problems experienced with the consultant suggest that the outputs could have been achieved at lower cost. While the work has clearly added some value, particularly for/via the TTL concerned, the magnitude of that value is difficult to assess.

CONCLUSIONS

It is very difficult to assess one very small piece of analytical work. The activity has had some influence on other World Bank knowledge and operational work and on international dialogue. The activity has enabled the TTL concerned to broaden the dialogue on wood energy as an

important aspect of forests in the context of low-carbon growth, and to contribute to strategic and operational work at various levels.

The activity was not well managed. The consultants did not deliver what was required, and the activity has not produced its intended output (a policy brief) after more than three years.

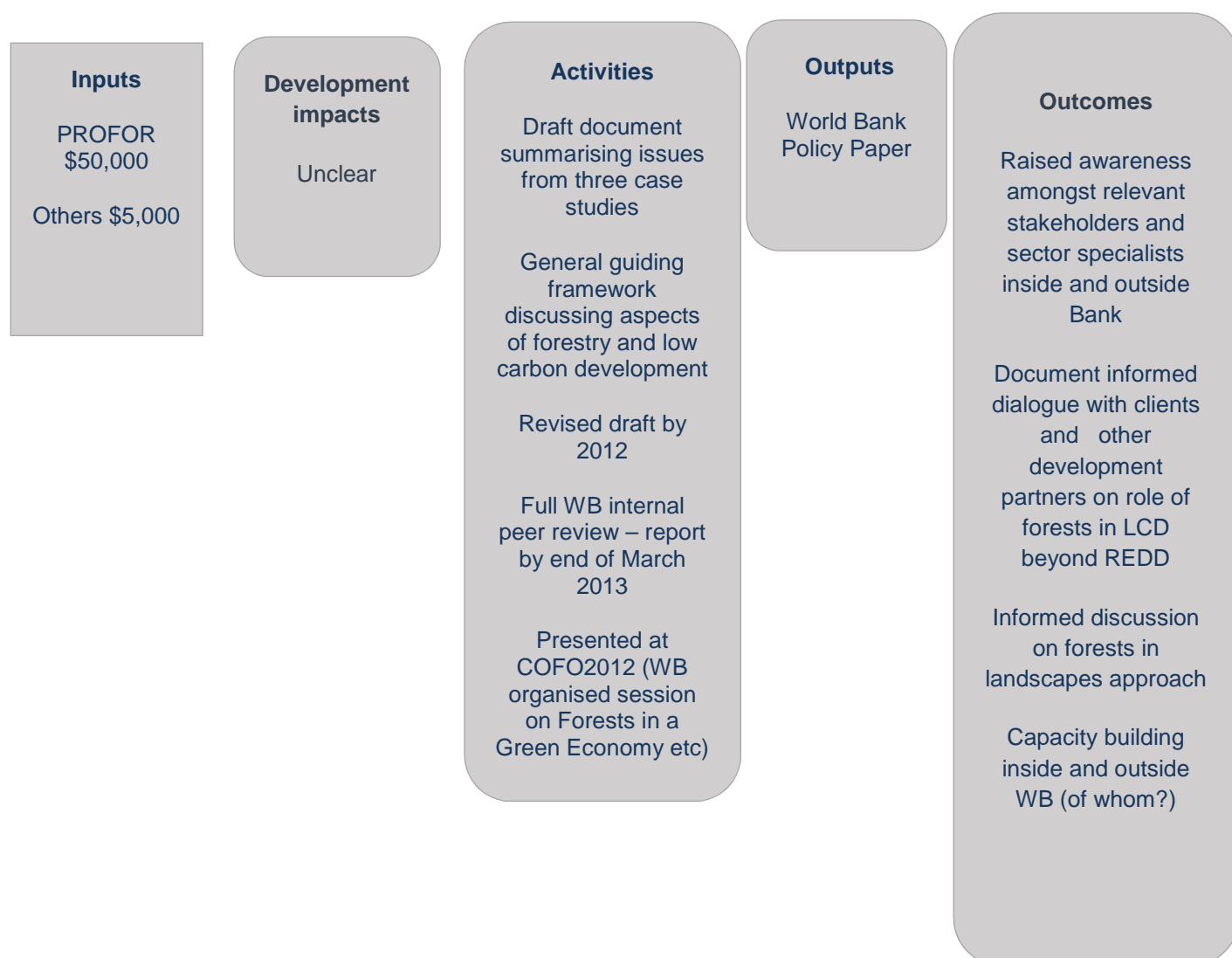
A final report has not been produced. While not necessarily the most important way of disseminating findings, the lack of a final report has probably reduced the influence achieved within and outside the World Bank.

LESSONS AND ISSUES

The consultant did not produce the standard of work required. This is one reason why no final report has yet been produced. The TTL has had limited time to work on the report himself.

There is still no final report for this activity two years after it was marked as completed. PROFOR needs to consider how it manages and supports projects to ensure that they deliver the intended outputs within a reasonable time period. This may require additional funding to complete the outputs or to take advantage of new communication opportunities.

Figure 2: Results Chain: The Role of Forests in Low-Carbon Growth Strategies



Biochar Systems for Smallholders in Developing Countries

Partners	International Biochar Initiative, Cornell University, BioCarbon Fund
Consultants	Prof Johannes Lehmann
Beneficiaries	IBI network members, BioCarbon Fund
Date of concept note preparation	2010
Duration	2010- 2011
Type of funding	Just in time
Type of knowledge product	Knowledge Product
Date of final output production	2014
Total cost	Total cost: \$79,692; PROFOR: \$47,692 Others: WB's BioCarbon Fund: \$20,000; Carbon War Room: \$12,000. PROFOR contribution 60%
Location/scale	Global (although emanated from LCR)
WB Task Team Leader	Sebastian Scholz
OBJECTIVES	
The funding objectives were focused on: 1) generation of independent knowledge on use of biochar systems accessible to smallholders; 2) comprehensively informing World Bank staff and management about biochar as an investment opportunity; and 3) provision of easily understandable background information to development partners and client countries.	
BACKGROUND AND CONTEXT	
<p>Biochar is the carbon rich residue of heating biomass without oxygen that releases bio-oil and syngas with high energy content. There is growing interest from public and private investors in biochar as a method for removing atmospheric carbon, rebuilding soil fertility and resilience to drought, whilst producing carbon negative biofuels. By 2010 biochar was increasingly being recognised as a technology with potential use to smallholder systems through rehabilitation of degraded soils and increased agricultural yields, as well as better predictability in crop production through a lower susceptibility to extreme climatic events. However, there was little known about biochar for smallholders. At this time there was only one life cycle assessment of biochar with a small amount of economic work relevant only to large-scale biochar systems. There had been no studies undertaken on lifecycle economics in developing countries and no information about what projects there were, what they were doing and the risks and opportunities associated with them.</p> <p>At the same time there was also significant criticism by influential NGOs of World Bank support to biomass energy projects because of the effects on landuse and a consequent high level of internal sensitivity to biochar as it is produced from biomass. For the BioCarbon Fund biochar was an important opportunity, but to gain acceptance it would be necessary to support work that had a high level of scientific acceptability by scientists in the fund, to ensure wider political acceptability, and at the same time address some of the critical concerns voiced by NGOs. This context framed the approach to the study.</p>	
IDENTIFICATION, DESIGN AND APPRAISAL	
Ideas for the study came from a series of key individuals who brought together external expertise and a network of practitioners (the Executive Director of the International Biochar Initiative), a prominent academic in the biochar field (with strong credibility and academic linkages), the BioCarbon Fund (finance and capacity to take biochar projects into implementation) and a TTL (with drive and interest) who had become aware through his own work and from media interest that biochar had possible development potential for smallholder farmers. Together the different interests	

of these individuals coalesced around the importance of developing World Bank support for biochar as a means to mobilise emissions reduction through agriculture.

Proposal development was focused on designing the tactics of how to leverage policy influence on biochar in the BioCarbon fund in particular. It was decided that an influential study published by the World Bank would be key to building this political acceptance within the Bank. A careful strategy was designed by the key partners in the study to ensure they targeted and engaged with people who needed to be influenced inside the Bank, as well as engaging with organisations outside the Bank that were critics of biomass programmes. An external guidance group of NGOs and academics both critics and supporters was constructed who were to provide feedback on the proposal. This group was engaged with by phone and face-to-face meetings to discuss the issues surrounding the use of biochar for smallholders. The critical understanding that drove the proposal development process was the importance of getting technical and political buy-in to the proposal from the start. This was furthered by discussion of the proposal during key expert meetings on biochar (third International Biochar Conference 2010) which led to refinement of the concept note. Subsequent review by internal and external peer reviewers further strengthened the note. During this period the TTL approached PROFOR with a request for funding and this was provided rapidly from the 'just in time' window.

IMPLEMENTATION

The study was developed at a time when there was no knowledge on which to base any form of investment. It took a comprehensive approach that looked at all available data, synthesising and building on the strengths of the different partners, convening an outside expert panel to input to the work and becoming an arbiter of information. It was uniquely positioned to use the convening power of the Bank with the strengths of a leading academic and the reach of the network to bring together information that had not been available in the public domain before and to be able to bring it to the attention of key actors through the platform provided by the Bank. If any one of these partners had acted alone it would not have been possible to deliver the type of product that emerged. This approach is valuable for complex development issues that transcend disciplines.

Two elements of the study were developed: the first a survey through the IBI network of its members to provide the primary source of data on small biochar systems; and the second managed by Cornell University development of life-cycle assessments of selected biochar technologies.

The first survey was conducted at the end of 2010 with a follow-up survey in early 2011. The survey was sent to several hundred members with a return from 150 biochar project members. This was a high response rate due in part to the survey coming from the World Bank. It was noted by IBI that members were particularly enthusiastic about the survey as it showed that the World Bank were potentially interested in the development of biochar. The purpose of the survey was to get an overview of the different types of development pathways for biochar and use this to develop a typology that could be used to identify case studies for full lifecycle analysis. This work was developed in partnership with Cornell University who carried out the life cycle assessments. A follow up survey to the 150 projects was conducted to identify social and economic barriers to further development of biochar. The information from this survey provided new knowledge and understanding about the traditional uses of biochar and the constraints to its further uptake.

Unfortunately the primary work and the report for publication was completed three years before it was finally published. There was a very slow internal process to review the study which led to a series of requests for further revisions and updating of the literature review, which because of the delays was now out of date.

Because of these serious delays, partners in the study used their own channels to share the information, graphics were distributed in stakeholder meetings and some were reproduced by other people before the report was published. Some of the material will also be produced in a forthcoming book on biochar.

OUTPUTS

Outputs were delivered in two distinct time-frames: 1) interim findings discussed at an important workshop in the World Bank in 2011; and 2) a briefing publication and the final study produced in 2013 and 2014 respectively. Considering the expected results depicted in the results chain (Figure 3) it appears that this activity did not deliver the final outputs that were planned in a sufficiently timely manner. The major research work for the study was conducted in 2011, so by 2014¹² when the report was finally produced, much of the data was out of date or had been superseded. However, earlier briefings at a workshop in the World Bank did mean that some of the interim results were shared.

The delays in production of the final output are attributable to the TTL moving to another group in the Bank. The study was shelved until the TTL could find another individual with the knowledge and interest inside the Bank to take it forward (Rob Griffen). There was no funding available for the finalisation of the work and at this stage the BioCarbon Fund stepped in together with funding from the Climate Smart Alliance.

Although the data are now old and have been superseded by other work, the methods and tools for analysing biochar projects, and developing a typology remain a robust package that could be applied again in a follow-up survey.

DISSEMINATION

Use of seminars and workshops

An effective use of workshops and brown bag lunches did raise the profile of this work both at an early stage in the proposal development process, as well as at an interim point where the results of the survey as well as the life-cycle assessment work could be discussed (2011). This meeting was attended by high-level individuals including an adviser to the US President on Science and Technology (who sat on the expert guidance panel) who could take the information through her own work to influence policy (although there is no evidence to substantiate this). These events were well attended and included some detailed challenge from economists at the Bank leading to changes in the report content, as well as further development of ideas and concepts. As a result of this meeting the lead academic for the study has been asked to contribute to the development of a project in the Republic of Congo.

Use of Sustainable Development Day

PROFOR sent out an open invitation to all TTLs who had developed PROFOR funded knowledge products to do a short introduction to their work to other TTLs. The work was shared through a brief presentation focused on how the knowledge could be used in development practice. However, it is unclear how PROFOR captured the interest of people who came to the event and whether this turned into tailor-made communications and follow-up with them.

Web presence

Three different searches for accessibility and availability of the final study were conducted: 1) PROFOR website; 2) Google scholar; and 3) a general Google web search and Google Books search. The full results of these three searches are provided in the Annexes. The table below summarises the results. The study was only published in 2014 (4 years after the start of the work) and citations to date are very limited (two), although it is easily accessible through a general Google

¹² Scholz, Sebastian M., Thomas Sembres, Kelli Roberts, Thea Whitman, Kelpie Wilson, and Johannes Lehmann. 2014. *Biochar Systems for Smallholders in Developing Countries: Leveraging Current Knowledge and Exploring Future Potential for Climate-Smart Agriculture*. World Bank Studies. Washington, DC: World Bank.

search. The PROFOR website has not been updated since 2011 and there are no links to the final product available, although it is available through the World Bank website (<http://elibrary.worldbank.org/doi/abs/10.1596/978-0-8213-9525-7>).

Through IBI the study has had a greater targeted reach through alerts to its membership. The link to the study report was consistently at the top of the 200 URLs visited on the IBI website (from July 2014 to now). For the IBI Facebook posts it reached 887 contacts which is higher than any other post on the IBI Facebook page.

Table 2: Web accessibility of Biochar Systems for Smallholders in Developing Countries activity outputs

Product	Date of Publication	Google search	Google Books	Google Scholar citations	PROFOR
Biochar systems for smallholders in developing countries	2014	p.1: 9 out of 10 references are to the PROFOR study	p.1: 1 st two references	p.1 reference 4 p.9 reference 10	http://elibrary.worldbank.org/doi/abs/10.1596/978-0-8213-9525-7

OUTCOMES

There are different sets of outcomes from this work depending on the audience and the partner involved. However, overall because of the significant delays to produce the study and the loss in momentum, much of the potential outcome has been dissipated. For the individual partners there have been some positive results: For IBI the study was instrumental in letting their members know that after 7 years of operation the IBI was getting recognition at a higher-level through its partnership with the World Bank.

For Cornell University, this work provided an important platform to bring together academic analysis and operational understanding. Without PROFOR the incentives for an academic institution to engage in this type of work are limited. These types of studies do not deliver material that can easily be published in academic literature, but play an important role in the delivery of cross-boundary understanding into the public domain. This study is important as it was able to go beyond peer-reviewed literature and bring something new to global understanding that could not be achieved through academic study or through a NGO constituency.

As a result of the work led by Rob Griffen from the World Bank the study was used to inform a range of internal and external audiences, including discussions with the Climate Smart Agriculture team. This will potentially lead to biochar projects supported through the CSA team. There are also recent inclusions of biochar projects in the FCPF programme for Republic of Congo, but this also cannot be directly attributed to the PROFOR study, as in this case one of the FCPF donors has been an active promoter of biochar.

OUTCOME RATINGS

	Influencing programmes, policies or policy dialogue	Advancing knowledge /understanding	Developing new tools and methods	Strengthening networks
Rating	Some	Moderate (in 2014) Significant (in 2011)	Moderate	Moderate

IMPACTS AND SUSTAINABILITY

There is no evidence of development impacts and the late production of the final report has limited the sustainability of the outcomes, since much of the data is now out-dated or superseded. The launch of the report in 2014 was less successful since it was based on work that had been completed in 2011. Despite these shortcomings the opportunity to take this work forward in the IBI network remains, and there are plans to repeat the survey of members to update and look at the emerging trends. IBI will need to seek additional funding to carry out this work.

VALUE FOR MONEY

Uncertain. Although the interim products shared through the World Bank workshop in 2011 did enable some early uptake of the results, the final study output was so delayed that much of the work that was done for this publication is now considered to be out-dated and of limited interest to a wider audience. This output was only delivered through additional finance from the BioCarbon Fund, as by this stage the PROFOR money had finished.

CONCLUSIONS

An important and timely identification of a key issue and its use for smallholder farmers; PROFOR funding for this cutting edge piece of work was well identified. However, the utility of the work was limited by the long delay in producing the final study outputs which limited the value of some of the work that was done, as it was out-dated. The processes used to build this study were valuable, including working in partnership with a leading academic in the field, bringing credibility and outreach to a wider academic audience, an important membership based network that allowed reach to practitioners and building of a knowledge base that had not been done before, together with the drive, interest and opportunity to build lessons into operational work through partnership with the BioCarbon Fund.

LESSONS AND ISSUES

The importance of interim products: a major lesson to emerge from this work is the importance of planning the release of interim products rather than relying on the production of a major study at the end of a process. Although there were dissemination events along the way, the opportunity to publish a briefing note or some other short report that could have reported on the findings from the study was not explored at an early enough stage. This limited the potential outcomes from this work and prevented early uptake of the results. It also meant that the initial enthusiasm and momentum gained in the IBI membership was also lost. The chance to contribute to the growing biochar community and debate was reduced as a result of the long gap between finishing the study and finalising for publication through the World Bank. One of the major advantages of PROFOR is the capacity to act quickly, respond to cutting edge issues and contribute speedily to the emergence of understanding and debates in new areas. The inability to follow through on this role in this case did reduce the potential outcomes from the work both within the Bank and outside.

Use of the convening power of the Bank: this study in particular shows the importance of careful use of the convening power of the Bank. The external guidance group could only be brought together by the Bank, none of the other partners could easily convene individuals from different sectors, technical and development specialists and then use this platform to input to the development of a proposal. It shows a model for cross-sectoral working that could have resonance beyond PROFOR funded activities.

Conditions for good outcomes for the biochar activity: there are several conditions that appear to lead to better interim and final outcomes:

1. The use of highly credible external partners together with an internal champion who has the connections to operational activities and networks within the Bank to assure uptake of results.
2. Identification of external partners (IBI) that have strong networks that extend to practitioners provides a clear uptake pathway for interim as well as final results (IBI for the biochar study).
3. Identification of leaders in the field to work on the particular activity also helps to elevate the internal World Bank interest in the results of the work, as well as ensuring that the results

are taken into other external arenas in which the leader operates (e.g. Prof Lehmann publication in academic journals, conference presentations)

4. Attracting external funding from high profile groups (such as the Carbon War Room) helped to elevate internal interest in the work and attracted greater attendance at workshop help in the World Bank
5. The use of an external guidance group with well-placed and critical observers able to input into development of the work as well as take some of the interim findings into their own work and policy dialogues.

Management lessons: although the seed funding provided by PROFOR was sufficient to start the work, it was necessary to leverage additional resources at the end of the process to ensure delivery of the final product. At the beginning of the process more guidance from PROFOR on possible costs of effective dissemination as well as processes for dissemination would have aided the progress of the work. In order to complete the work additional funds from the BioCarbon fund were necessary; without this money it is unlikely that the final product would have been produced. This raises questions about when PROFOR's responsibility for an activity ends and what happens when an activity has not completed its intended outputs.

Maximising the effects of the PROFOR money - where does PROFOR begin and end?

Understanding the extent of PROFOR's responsibilities and managing these boundaries is an important part of ensuring the sustainability of the work funded by PROFOR. It is difficult to assure the continued leadership of an activity by a TTL who have many pressures on their time, particularly to most fully harness the dissemination potential of their work. It is at this stage that PROFOR needs to be able to take a knowledge product through to active dissemination and to ensure that messages are tailored to different audiences in ways that will attract their interest in the work. As the comments in Box 2 indicate those external actors who were involved with the study did consider that PROFOR needed to take a more active role in ensuring the products of study emerged in a timely and targeted fashion, to maximise the benefit. This would also help to ensure that PROFOR moves beyond this perception that it is just a fund, and does not add further value to processes to which it provides money. In the end it is how the message is sold that is important, biochar is not just a quirky technology but it is aligned with strategies for climate change mitigation, mitigation of poor land-use practices, a contribution to improved cook-stoves and better use of rural energy and reductions in indoor pollution. With this set of messages there are clearly different target audiences and means to engage them with the work.

Building a constituency and ownership over activity: the use of an external guidance group illustrates an important lesson in how to build critical input into proposal development and to ensure that voices critical to an activity have an opportunity to engage and shape the direction of the work. The guidance group worked to an extent as it allowed different perspectives to be addressed. There were initial concerns from some of the partners that setting up such a group would slow the process down, but instead it had the unintended effects of raising the ability of the partners to articulate the benefits of the work in ways that would not have been possible without these different voices challenging the work.

Ensuring PROFOR products have a long tail: the work done through the biochar study provides an important baseline that could be followed up. The initial survey conducted through the IBI is the first time this information has been collected. A follow-up survey could provide useful information on how small-scale systems have evolved, identify the current economic barriers, and revisit the typology developed during the first survey. PROFOR needs to be proactive in identifying those areas of work where follow-up could be usefully funded as well as partners that could take this forward.

Box 2: Selected responses – Biochar Systems for Smallholders in Developing Countries

'I am an absolute advocate of biochar and have been for a very long time, but I am blissfully unaware of PROFOR's work on biochar. Had I known about this work I would have been involved with it, it is surprising I was unaware' (Bank staff member)

'without the BioCarbon fund stepping in at the last moment the report would have been lost' (Bank staff member)

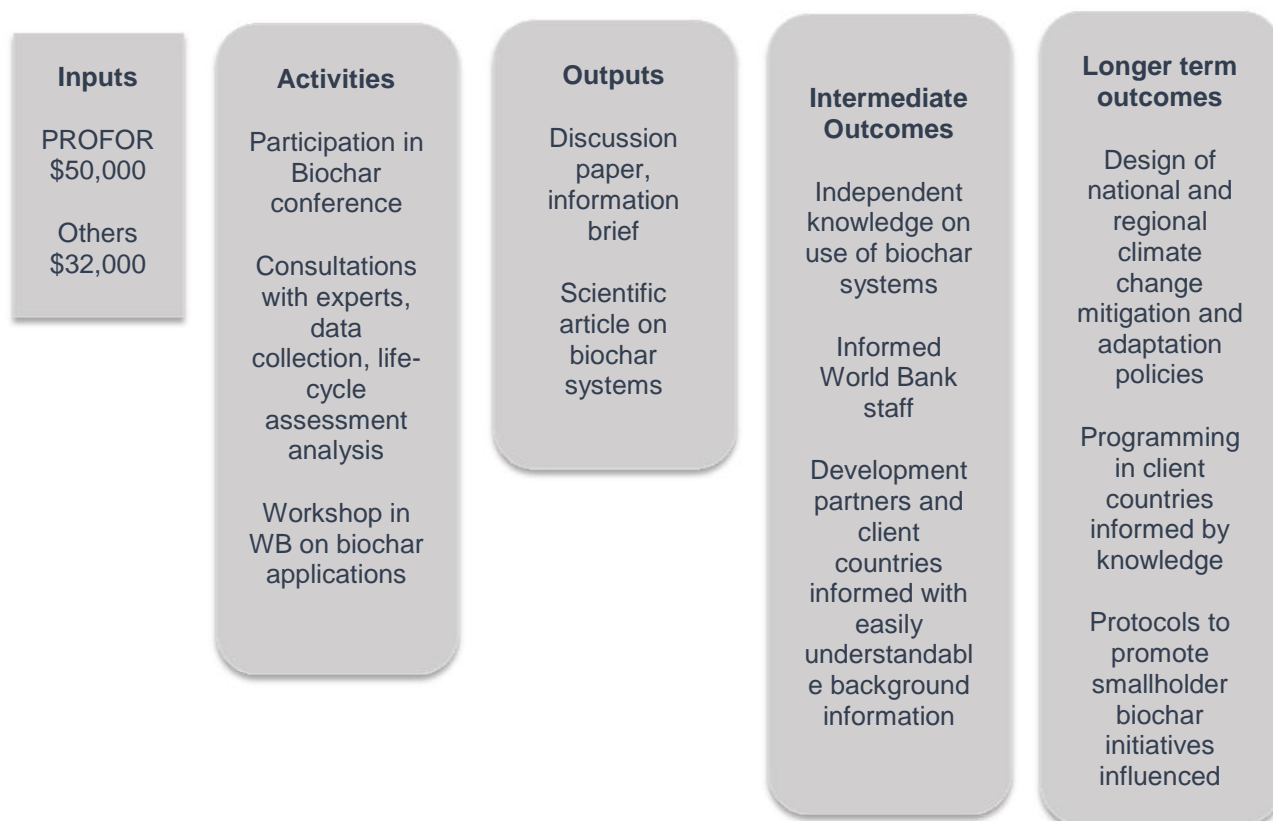
'PROFOR – they did not have a profile nor did I engage with them – I never thought about them and they did not communicate with us, it was a funding pot only' (external partner)

'PROFOR only came in through the chequebook!' (external partner)

'you need to link innovative ideas to interesting discussions to get the interest of a wider audience – this is the job of PROFOR' (bank staff member)

Figure 3: Results Chain – Biochar Systems for Smallholders in Developing Countries

Illustrates the intended results of the work and assessment of impact from the completion report



Economic Growth and Drivers of Deforestation in the Congo Basin

Partners	COMIFAC, IIASA
Consultants	Not applicable
Beneficiaries	Congo Basin governments
Date of concept note preparation	First concept note December 2008 detailing activity and need for funding to develop the actual concept note for funding by PROFOR. Second concept note February 2009 (approved in June 2009) based on the design workshop for the concept note held in Kinshasa in January 2009
Duration	February 2009 to December 2009 extended to April 2011
Type of funding	Programmatic
Type of knowledge product	ESW
Total cost	Total cost: \$679,771 PROFOR: \$121,771 DFID: \$170,000 FCPF: \$45,000 Norway: \$193,000 TFESSD: \$150,000 PROFOR contribution 18%
Location/scale	Africa
WB Task Team Leader	Carole Megevand
OBJECTIVES	
The objectives were focused on: 1) providing an in-depth analysis of the major drivers of deforestation and degradation over the next decades in six Congo Basin countries; and 2) development of robust methodological tools to support the setting up of national scenarios based on different development trajectories.	
BACKGROUND AND CONTEXT	
At the time of the development of this work, 2009, REDD+ activities had been initiated internationally and there were high hopes in the Congo Basin countries that they could also benefit from REDD+ support. The World Bank support was a critical contribution to the countries to help build their arguments and positioning for the international negotiations. At this stage, the discussions concerning REDD were focused on establishing historical rates of deforestation as the basis for future payments. For the Congo Basin countries their histories had led to low levels of deforestation and therefore compared to countries like Brazil they would be unfairly discriminated against if historical rates were used. The arguments therefore had to be developed on likely scenarios for future deforestation and understanding these drivers.	
IDENTIFICATION, DESIGN AND APPRAISAL	
PROFOR funding came into a pre-existing set of funded activities that had been initiated by the TTL together with COMIFAC, based on work they were developing to inform the REDD agenda and the country discussions. There was a very strong demand articulated by some of the Congo Basin countries, in particular Gabon, for this work. There were multiple partners responsible for different aspects of the work, with funding from France, Norway and UK. Together all these activities were focused on understanding the drivers of deforestation and the issues of leakage across countries in the Congo Basin. COMIFAC and the six countries took a strong lead in the work, as there was an urgency to understand the drivers of deforestation and to use this to inform REDD+ negotiations. The PROFOR funding contributed 18% of the total funding for three areas of activity – 1) technical coordination for development of a concept note for submission to PROFOR for subsequent funding; 2) identification of knowledge gaps; and 3) developing the modelling methodology to adapt existing tools to the Congo basin context. The PROFOR funding was an important contribution to the overall	

success of the work. To be effective at the international level, the Congo Basin countries had to have strong analytics that could inform national and international negotiations.

The technical coordination finance resulted in the production of the concept note for the remainder of the work. The concept note was co-designed at a workshop held in Kinshasa in 2009 with representatives from the 6 Congo Basin countries as well as key organisations that would be involved with the study. The workshop provided an opportunity for clarification of activities to be carried out as well as a clear demarcation of roles and responsibilities. Further work after the workshop was necessary to finalise agreements on the work plan and the allocation of responsibilities.

IMPLEMENTATION

Following concept note approval the two other activities could start. The modelling work, supported by IIASA, used their GLOBIOM model as the basis for a regional model, using international data. The team from IIASA had a short period in which to adapt the global model, but because they were working with the same group of stakeholders from each of the six countries there was considerable engagement with the work. The initial results from the adaptation were shared at another workshop attended by the same people who had been present at the original concept note design workshop. The outcome from this workshop was a briefing note on 'Reference levels and trends of deforestation in the Congo Basin'. This was distributed during the Copenhagen COP 15 (2009) at a side-event organised by COMIFAC. The briefing note was considered to be useful to negotiators to argue for an adjusted reference level for REDD. Following the development of a regional model, a process was started to collect country-specific data.

The modelling, part-funded by PROFOR was important because the countries needed persuasive results, but it was a trade-off between getting the data necessary for a regional model and building ownership amongst the countries. As a way to manage the trade-off, the countries built the scenarios and IIASA agreed to build capacity so that the individuals involved could understand the logic underlying the scenarios and models and could change the parameters themselves. To ensure the negotiators understood what was being developed they worked closely with the modellers. The data collection was done by ONFI working with national consultants.

The separation of the modelling activities from the analytical sectoral work was a missed opportunity to bring them together. It meant that the modellers had to do their own analytical work to feed the models, and the other analytical work ended up being repetitious of what had already been done. A more linked approach to these two pieces of work would have added value to both.

At the start of this activity, the major partners at national level were the forest ministries. However, taking a multi-sectoral approach to the study brought together all the ministries that were relevant to understanding drivers of deforestation. The modelling feedback workshop built awareness of the inter-linkages between sectors such as energy, mining, infrastructure and agriculture and the importance of understanding these linkages in order to understand drivers of deforestation.

OUTPUTS

The PROFOR funding provided 10% of the overall funding support to the modelling work conducted by IIASA (the remainder was provided by DFID). There were a series of important interim outputs from this work that contributed to an important document produced by COMIFAC for use at the COP 15¹³ and a briefing note produced for the negotiators. Recommendations from the second workshop where the initial findings from the model were discussed highlighted the need for data collection in all six countries, this was coordinated by ONFI working with national consultants. These data were integrated with the GLOBIOM model and presented at a third workshop held in 2010. This covered the final results of the IIASA model as well as the sectoral studies work (agriculture, mining and

¹³ <http://profor.info/sites/profor.info/files/docs/congo%20bat-uk-hd.pdf>

energy). This workshop was used to train participants on the GLOBIOM/CONGOBIOM tool. Others funds were used to produce the final study. The study has been very important in terms of raising awareness of the work carried out, particularly as it has been published in French and English allowing a much broader dissemination in the region. However, some commentators in the region have questioned why there were no co-authors from the region, given their involvement in the study, suggesting that this would also have increased the outreach of the study.

DISSEMINATION

Use of workshops

The programme used workshops as an integral part of the design, capacity-building, sharing and disseminating knowledge as it emerged from the work. This was an important part of the process to build ownership and understanding amongst a selected group of people that attended all three of the main project workshops. The high-level conference organised at the end of the work to launch the final study involved participants from the six countries. An e-survey was conducted to seek their views of how the work has been useful to them, unfortunately there was a very small response rate, and this only from people directly involved in the study. The feedback indicated a positive response to the study, but limited response to indicate how the respondents had or would be able to use the results.

Web presence

Three different searches for accessibility and availability of the final study were conducted: 1) PROFOR website; 2) Google scholar; and 3) a general Google web search and Google Books search. The full results of these three searches are provided in the annexes. The table below summarises the results. The study is easily searchable on a general Google search and Google books. The main study is cited on Google scholar but not until later pages with higher levels of citations than the other activities evaluated. The PROFOR webpage for this activity was last updated in 2013. The final study is difficult to search for directly on the PROFOR website. If the searcher knows about the work and uses the news and event and knowledge pages the final study can be accessed. From the field notes page the final study in

Table 3: Web accessibility of Economic Growth and Drivers of Deforestation in the Congo Basin activity outputs

Product	Date of Publication	Google search	Google Books	Google Scholar citations	PROFOR
Deforestation trends in the Congo Basin: reconciling economic growth and forest protection	2013	Easily searchable by keyword and full title p.1. 1 st reference	Easily searchable by keyword and full title p.1. 1 st reference	Does not come up on first page but on pp. 3-16 depending on the keyword search (between 6-9 citations)	Available but have to work through other pages to access it, not easy to find directly. Use of full study title also did not lead directly to relevant knowledge page

Academic articles have also been published as a result of this work.¹⁴

OUTCOMES

The activity had two significant outcomes: 1) externally it was a highly innovative study at the time as it was the first to provide an in-depth cross-sectoral analysis at the landscape level; and 2) internally it was recognised as an innovative approach to 'break silos across different sectors' (decision meeting minutes June 6 2012). The decision meeting held to review the final output also indicated significant interest from the IFC to replicate this study in other regions. The information was used by COMIFAC at the COP 15 to support the argument that REDD+ for the Congo Basin countries cannot be based on historical rates of deforestation. It is considered by key actors in the region to be an important study. The conclusions of the study were particularly important as they showed it is possible to combine developmental objectives with minimising forest loss or environmental costs if certain measures are considered. It does not have to be forests or mining, forests or agriculture, if the appropriate frameworks are in place.

At the start of the process COMIFAC and the World Bank were only working with the Ministries of Forests and focused on illegal logging. By the end of the work, ministries of forestry were brought together with mining, agriculture and planning all focused on understanding the effects of driver of landuse change on natural forests and the trade-offs that have to be made. This was a very significant difference that the study contributed to.

In May 2013 (after the end of the funding to this activity), a dissemination conference was held with high-level attendance from all 6 countries. There was a marked change over time in the understanding amongst the participants in the study. The regional modelling allowed policy makers to quantify the impact of policy shocks, and identify those that are more likely to have direct impacts in the Congo Basin. There were three main changes in knowledge and deepening of understanding amongst the participants from participating in the data collection processes, the scenario building and modelling:

1. Future deforestation is mainly dependent on decisions taken in agriculture.
2. Drivers outside the region, particularly changing infrastructure and access to markets potentially have a major impact on forests inside the region.
3. Data and statistics were seen to have an important value in policy decision-making with the realisation that the lack of good data and incentives to collect and maintain data is a major problem for land-use planning.

The modelling work has been used by the countries in their R-PPs, for example DRC and the Republic of Congo expressly reference the IIASA modelling work¹⁵. DRC used some of the data from the modelling in their REDD+ strategy presented at Doha (COP 18) in 2012. The study has allowed COMIFAC members to take the study recommendations to inform development policies and to better orientate policies within the national framework.

OUTCOME RATINGS

¹⁴ Modelling impact of development trajectories and a global agreement on reducing emissions from deforestation on Congo Basin Forests by 2030 A Mosnier, P Havlik, M Obsersteiner 2014 Environmental Resource Economics 57: 505-525 journal article

¹⁵ 'Modeling work performed by research center IIASA has made it possible to highlight future international factors in the Congo Basin region, that are expected to come along with the opening of the national economy'. http://unfccc.int/files/land_use_and_climate_change/redd/submissions/application/pdf/redd_20100708_drc_1-20100302b.pdf

The Republic of Congo R-PP proposes the testing of three options in its R-PP, one of which is the national adaptation of the IIASA regional model. (p.64) https://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/English_RPP_Congo_final_April_19_2010.pdf

	Influencing programmes, policies or policy dialogue	Advancing knowledge /understanding	Developing new tools and methods	Strengthening networks
Rating	Significant	Significant	Significant	n/a
IMPACTS AND SUSTAINABILITY				
<p>It is too early to judge the impact of this work. Although the follow-on work that IIASA is conducting, funded by the German Government has ensured that the initial work can be sustained and further developed. This follow-on project (€1 million for 4 years) is based on the recommendations from the World Bank funded study. This has built on the lessons from the first study to include livestock modelling and three national models. Under the PROFOR funded project the one-year study was insufficient to really train and build the capacity of local experts, this has now been addressed in the new project run by IIASA in partnership with COMIFAC. Without this initial work funded by PROFOR, IIASA would not now be able to support this national-level modelling, as prior to this they did not have the working experience in the Congo Basin.</p> <p>In addition the World Bank is using the study recommendations to inform its own programming to illustrate it is possible to combine forests and agriculture development (Eastern DRC). It has also informed programming outside the region including in Madagascar in a recent project of intensification of rice growing in Madagascar. The same issues highlighted by the Congo Basin study were used as exemplars to understand ways in which land use can be considered on a regional basis and as interlinked sets of resources.</p>				
VALUE FOR MONEY				
<p>As a relatively small input to a major piece of work, the significance of the PROFOR money is hard to assess separately. Clearly, however, this work overall has had significant outcomes and the PROFOR finance was an important contribution to these outcomes.</p>				
CONCLUSIONS				
<p>The assessment of the contribution of the PROFOR funds to the overall outcomes from this study is difficult to make, as it is hard to separate out the PROFOR money from the overall funds. There is no discrete area of funding that it supported. However, the PROFOR money was well spent in an important process that continues to be funded through bilateral funds to IIASA allowing deepening of the work in each of the six countries, and continued engagement with COMIFAC as partner to this work.</p> <p>Returning to the original results chain, this work has delivered as it was originally intended. Although the evidence of change in individual capacity and knowledge is difficult to document, it is clear from interviews that there is a stronger understanding of the inter-relationship between land-use decisions and maintenance of the forest resource and a recognition of the necessity of cross-ministerial working. It also highlighted the trade-offs that have to be made by countries when deciding on productive use of natural resources. However, the governance and institutional barriers to delivering on this understanding remain difficult to overcome. A study such as this is just one part of helping to reduce some of these barriers.</p>				
LESSONS AND ISSUES				
<p>Building capacity through working with the same individuals: the same individuals were involved in all three key workshops. This did ensure understanding and capacity could be built in these individuals over time for this activity. Unfortunately however, the same individuals could not form part of the follow-on IIASA project, as they had moved to other assignments, but IIASA have retained the partnership with COMIFAC ensuring continuity in institutional engagement with the work.</p>				

Importance of interim products well targeted to key events: this large piece of work had a series of interim products that were targeted at key events. This is an important element of the process that ensured that knowledge was used well and did not have to wait until a final product was produced.

Building ownership over the concept: the use of PROFOR funding to include those who were to be involved in the study in the initial design, was an important element of this work. This ensured there was agreement over the work plan and clarity in roles and responsibilities.

Importance of national level cross-sectoral working: The processes used during the Congo Basin study brought together ministries from other sectors that do not normally work together with the forest and environment ministries. This gave them practical insights into what needed to change from their sectors to minimise deforestation and optimise productive use of the forests.

Use of language to engage outside the forest sector: This study demonstrated the importance of engaging with other key actors both inside and outside the Bank through use of language and approaches that resonate. There was considerable support for the study from within the Bank, the findings were used in direct discussion with country directors, and since the study was framed in economic language it was considered to be more persuasive enabling a more direct engagement with the outcomes of the work.

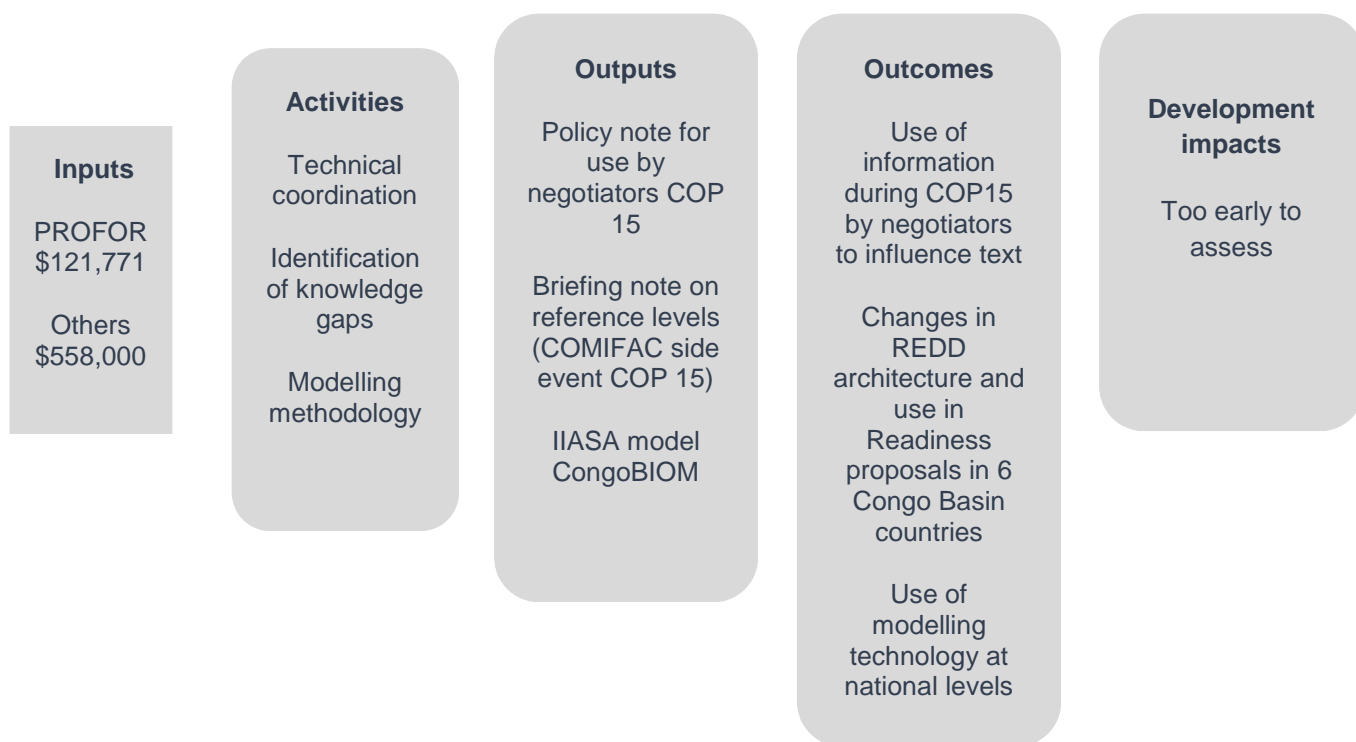
Making the case for forests in the wider productive landscape: PROFOR has an important and role to play in making the case for forests as a productive resource that can deliver jobs and revenue. This study was an important contribution to this debate and highlighted the trade-offs inherent in land-use decisions on forest land. It provides the basis for future work on these issues in other regions. PROFOR could consider how to support similar analytical work in other regions that could usefully inform the development of investment programmes from agriculture for example.

Box 3: Selected responses – Economic Growth and Drivers of Deforestation in the Congo Basin

‘PROFOR needs to build the robust evidence for forests and economic growth. The value of PROFOR is that it is inside the Bank, the way the work they fund is used inside the Bank is important. Because it is an instrument inside the Bank it is responsive to the countries and builds ownership with them from the beginning. Studies that are supply driven do not deliver – in this case we had a country owned process, it was the first step in a sensitisation of people to a different way of doing business.’ (World Bank staff member)

Figure 4: Results chain: Economic Growth and Drivers of Deforestation in the Congo Basin

Illustrates the intended results of the work and assessment of impact from completion report



Targeting Watershed Rehabilitation Investments in Turkey

Project ID	TF094282
Partners	
Consultants	ISRIC – World Soil Information
Beneficiaries	
Duration	April 2009 – January 2012
Type of funding	Programmatic
Type of knowledge product	PE (IBRD project)
Total cost	Total cost: \$177,600 PROFOR: \$ 160,000 World bank Administrative Budget: \$ 17,600
Location/scale	Turkey
WB Task Team Leader	Peter Dewees
OBJECTIVES	
The objective of this activity was to develop and implement a methodology for prioritizing investments in watershed rehabilitation on the basis of clear and objective criteria, reflecting the risks, the extent and nature of land degradation and deforestation and, to the extent possible, incorporating poverty alleviation objectives [Concept Note]	
BACKGROUND AND CONTEXT	
The Government of Turkey has become a global leader in the fight against soil erosion, by making extensive investments in rehabilitating degraded landscapes using a range of strategies to promote	

afforestation and deforestation. With support from the World Bank, poor communities in upland catchments have been engaged in developing and implementing a program of watershed rehabilitation. This program emphasises the importance of addressing trade-offs: communities are far more willing to engage in afforestation and reforestation activities, rangeland rehabilitation, and soil conservation when there is an assurance that needs for employment and income generation can be addressed. Consequently, investments have been the outcome of negotiated agreements between communities in affected areas and Government which enables Government to engage in watershed rehabilitation activities, reducing erosion and downstream flooding and improving the long term timber supply through reforestation on the one hand, while introducing income generating opportunities such as bee keeping, improved livestock production, and horticulture on the other. This integrated approach has succeeded in helping to tackle the problem of poverty in these communities. It has also succeeded as a model for rural service delivery by providing a platform for multiple government institutions to work together to be responsive to locally identified constraints and needs.

One of the greatest weaknesses of the approach, however, has been that the selection of the most critical catchments for investment in land rehabilitation activities such as afforestation and reforestation remains somewhat subjective. Ministry staff target investments by trying to balance the need for the rehabilitation of badly degraded areas with perceptions of the prevalence of rural poverty, and areas hard-hit by rural to urban migration.

There are tools which could be used to improve the decision making process, firstly by assessing the extent of land degradation, and then by incorporating social and economic data into the assessment using the results from national household surveys of expenditure and income.

This project seeks to address these two themes: first, identifying land degradation hot spots in Turkey, using time series NDVI data and analysis pioneered, for example, in FAO's *Global Assessment of Land Degradation and Improvement (GLADA)*, and second, working with available datasets on wealth and poverty in Turkey to improve an understanding of where the poorest households are most vulnerable to the problem of land degradation. [Concept Note]

IDENTIFICATION, DESIGN AND APPRAISAL

The World Bank was supporting the Turkey Anatolia Watershed Rehabilitation Project and was in discussion with the government about a possible follow-on project. However, the World Bank was uncomfortable with the way in which the areas proposed for rehabilitation were selected and pushed for a more objective and transparent approach. There was some support for this within government, but no clear methodology.

The idea of using NVDI and rainfall data to objectively select watersheds came from a presentation on Kenya by an ISRAIC consultant at a GEF meeting in South Africa in 2008. It was agreed in discussion with the Turkish government that this had potential in Turkey, and might be overlaid with poverty data to select priority watersheds.

IMPLEMENTATION

It was agreed that ISRAIC were the best people to do bio-physical analysis. Unfortunately, the consultant who had done the original work in Kenya was not available. The replacement consultant was less experienced at producing policy work.

Implementation performance was generally good, although a number of delays (eg. obtaining the necessary data) hindered delivery of some of the interim and final products. Constructing poverty maps was a special challenge. Information about the incidence of poverty in Turkey has political implications, and the state agencies with access to geo-referenced poverty data were not willing to make this available for this analysis. As a proxy, the analysts were able to collect data from the UNDP Human Development Report, but it was not available at a scale which might have been useful.

The TTL responsible for watershed work in Turkey, and therefore this activity, changed twice since 2009. This reduced knowledge about, and ownership of, this PROFOR activity within the World Bank country office. The direction of World bank strategy in Turkey also changed over time.

OUTPUTS

Biophysical (mainly NDVI, climate, DEM) and socio-economic data were collected and compiled into geo-referenced datasets. An extensive series of maps showing NDVI, climate, etc. were produced.

According to the Completion Report, two general findings are of particular interest. First, strong greening has taken place in the interior of Turkey, despite declining rainfall in these areas and increased temperatures. Second, significant improvements in Rainfall Use Efficiency are evident in the interior of the country, as are degradation hotspots in the northeast and southwest corners.

An interim progress report was prepared and submitted. A final draft report was prepared, and extensively reviewed internally and externally, but not finalised or made publicly available.

The draft report was not well received by the Government. The main problem was that the quality of the text which accompanied the maps was of a low standard, and needed to be significantly redrafted to make it useful and policy relevant. The consultant did not have the resources to do this so work on the activity was halted. However, the politics of the poverty overlays made the report sensitive and unlikely to be released in any event. The direction of the dialogue between the World Bank and the government on poverty and agriculture also changed, which meant that there was no longer a specific audience for the work as originally envisaged.

At the time of the completion report in January 2012 it was expected that PROFOR would commission the preparation of a policy brief around the issue of land degradation and “re-greening” so that some of the findings could be made more widely available, even if the final report could not be finalised or released. This did not happen.

DISSEMINATION

No final report or policy brief has been produced. None of the interim project outputs have been made publicly available.

OUTCOMES

Although none of the outputs were disseminated outside Government, the activity is reported to have helped catalyse the preparation of a Turkish national strategy for watershed rehabilitation under the leadership of the State Planning Office. The mapping work is reported to have been an important input to this strategy.

This outcome could not be verified. The original TTL is unsure of the extent to which the outputs informed the national strategy.

OUTCOME RATINGS

	Influencing programmes, policies or policy dialogue	Advancing knowledge /understanding	Developing new tools and methods	Strengthening networks
Rating	Some	Some	Some	n/a

IMPACTS AND SUSTAINABILITY

No development impacts are likely as a result of this activity.

VALUE FOR MONEY

The value of this activity has been very limited. The original objective was not achieved, and no final output was produced. There is no evidence of any influence on the World Bank dialogue or programme in Turkey, and weak evidence of any influence on government policy or practice.

CONCLUSIONS

This activity did not achieve its objective and has produced little of value. The likely sensitivity surrounding the poverty data might have been predicted, but otherwise the activity was relevant and potentially useful at the start. A combination of factors led to the disappointing outcome. These include the quality of the ISRAIC consultant; the change in TTL; the change in World Bank strategy in Turkey; and PROFOR's decision not to commission a policy brief based on the work. The latter might have salvaged some wider value from an otherwise unsuccessful activity.

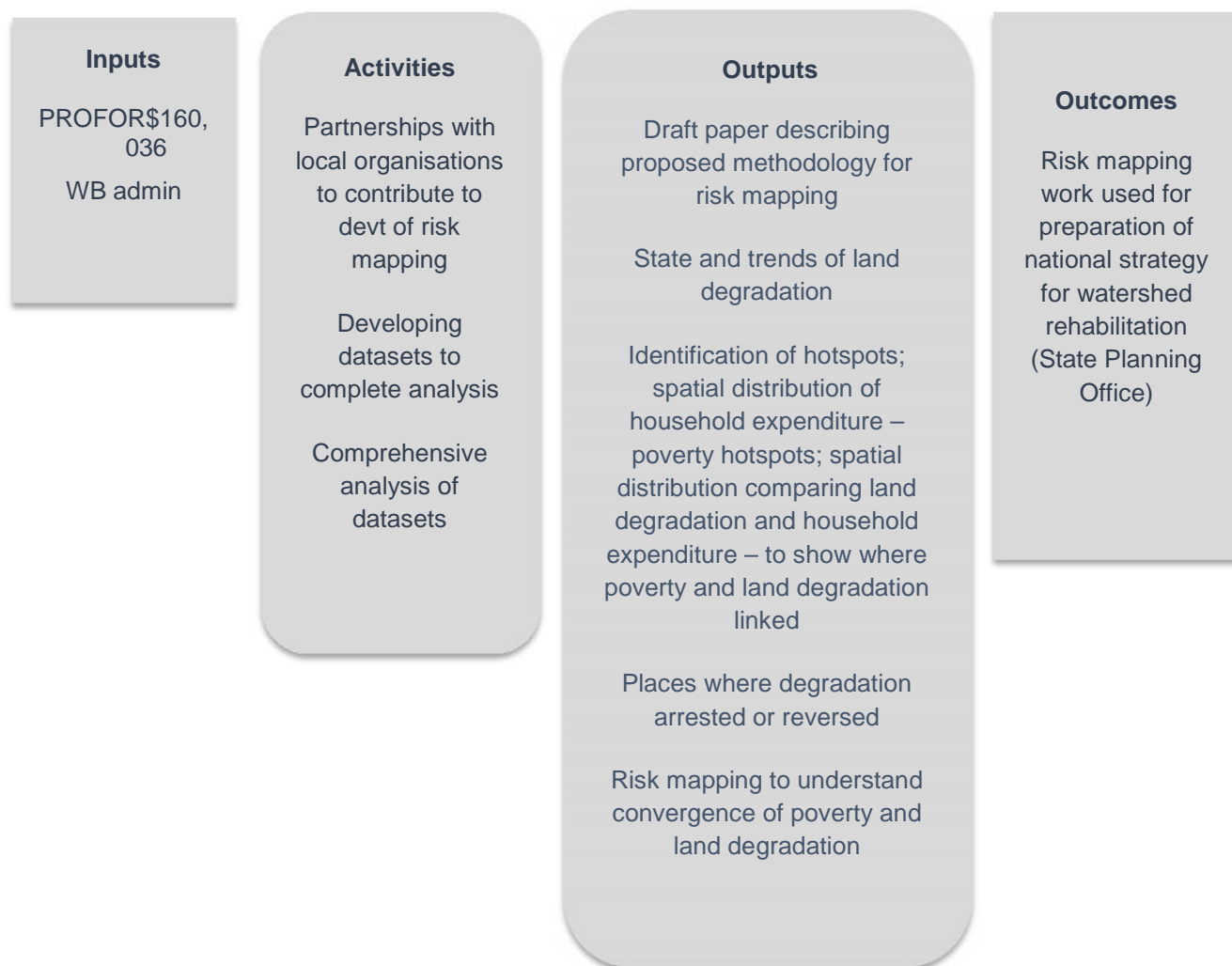
LESSONS AND ISSUES

Not all activities will succeed in a programme that takes some risks. This is to be expected.

It is difficult to see how most of the factors that contributed to the failure of this activity could have been predicted or avoided. It was the combination of the factors that was so unfortunate in this case.

The one possible lesson relates to the follow-up support from PROFOR that was mooted, but not in the end provided, at the end of the activity. Some value might have been salvaged had PROFOR commissioned and disseminated a policy brief drawing on the methodology and findings of this activity.

Figure 5: Results Chain - Targeting Watershed Rehabilitation Investments in Turkey



Lessons from Indian Watershed Management Projects

Partners	None
Consultants	Crispino Lobo, Jim Smyle
Beneficiaries	Government of India - India Watershed Management Programme; practitioners in the World Bank and clients globally
Duration	April 2009
Type of funding	April 2009 to February 2010 (no grant extension)
Type of knowledge product	Programmatic
Total cost	PE (IDA Project) Uttaranchal Decentralized Watershed Development Project (P078550)
Location/scale	Total cost: \$154,575 (only \$68,101 was spent as the grant was not completed) PROFOR: \$130,075

	<p>Other: \$24,500 (\$20,000 from the State Agency and \$4,500 from the World Bank)</p> <p>Returned to PROFOR fund: \$44,645 (remaining unspent balance was returned to PROFOR parent trust fund)</p>
WB Task Team Leader	India
OBJECTIVES	
<p>The objectives of this activity were to: 1) document the positive outcomes from best practices and lessons from the World Bank supported watershed management projects in the Indian states of Himachal Pradesh, Uttarakhand and Karnataka; 2) package the documented findings into various products for dissemination to practitioners within the Bank as well as to Government of India and other clients and collaborators elsewhere</p>	
BACKGROUND AND CONTEXT	
<p>The World Bank history of support to watershed development started in the early 1990s. The World Bank had been supporting three watershed management projects in India in the states of Himachal Pradesh, Uttarakhand and Karnataka. These projects were recognised as among the better practice examples in the Bank for integrated watershed management. Since they covered a wide range of elevations, zones and farming systems, together they could provide lessons from the innovative practices they had developed to other Bank-financed watershed programmes as well as to centrally-financed government schemes in India. Bank support was moving into a new generation of financing, projects were winding down and the TTL was starting to work with government to develop the next generation of Bank support.</p> <p>The central issue this activity was set up to address was the need to capture the learning from these programmes to ensure it was incorporated into future Bank and Government of India support to watershed management. The work was to be done from two perspectives: one from the national perspective to identify best practice and secondly from the international perspective to identify the best practice from the Indian portfolio and use it to inform global practices. This latter objective was to be met through the promotion and dissemination of the learning through the watershed management community of practice inside the Bank.</p>	
IDENTIFICATION, DESIGN AND APPRAISAL	
<p>The importance and timing of this work was critical to the Government of India. Micro-watershed management had become one of the main instruments for rural development and poverty alleviation, and so had a high profile and interest with government. At the time of this proposal, government were conducting their own internal evaluation of their programmes to set the agenda for the next five year plan. Gol through their own evaluations had identified a clear set of lessons including the gaps between analysis of the problem and their capacity to develop on the ground. There was good knowledge of the problems and issues, but less knowledge of the ways to address the problems. There was clear interest from the government in the products of this study and with the high-level access that the TTL had as well as his levels of credibility and experience with the watershed projects in India, the study was well placed to deliver the necessary empirical experience to a policy process interested in uptake of the lessons.</p> <p>As with any Triple A (Analytical and Advisory Assistance) financed work in the Bank before submitting any proposal the ideas were extensively discussed by the TTL with the government clients for the study outputs. Agreement on the concepts were obtained as well as the processes to be followed in the three states.</p>	
IMPLEMENTATION	
<p>This study, conducted by two highly experienced consultants selected because of their important sets of attributes: 1) extensive experience of the World Bank systems and its watershed projects (an ex-World Bank TTL who had worked in India for a long time); and 2) high-profile as the founder</p>	

director of an influential Indian NGO renowned for its watershed work, with excellent networks across India and high-level access. This combination of skills ensured that the lessons were more easily acquired through pre-existing trusted relationships as well as being more easily transmitted to key individuals at different levels of government as well as in the development community.

The work was done through 2010 and included visits to the three states. This included interviews with people at all levels of implementation. Access to key individuals was achieved through the extensive relationships of Crispino Lobo. Much of the work was confirming his already deep knowledge of the issues and confirming the findings of the importance of understanding the hydrological conditions of watersheds with key experts. The draft reports produced from this work were built on intensive discussions and workshops in all three states.

At the time the project director¹⁶ for the Karnataka watershed project was deeply involved in the lesson-learning process. The immediate knowledge created through this process was used directly by the project director in the design of the new follow-on Karnataka watershed project and also by the TTL to input into the Neeranchal project design.¹⁷ It was planned that this study should be synthesised and published as a high quality World Bank report in 2011/2012.

OUTPUTS

There was no final output from this grant due to a series of issues with the hand-over to a new TTL. As a result the total budget from PROFOR was not spent and was returned to the trust fund. A subsequent application to PROFOR for a follow-up grant enabled this initial work to be published as well as further work to be undertaken, this is currently on-going. The study was published in March 2014 as a World Bank Agricultural and Environmental Services Discussion Paper. The study was brought together by the TTL and another staff member and was extensively peer reviewed by leaders in the field (including John Kerr from the University of Michigan).

DISSEMINATION

Use of seminars

Preliminary findings were shared at a national-level workshop hosted by the World Bank in Delhi in 2011. Unfortunately because of the problems with the grant, this could not be followed up until the study was finally published under the second grant with a recent workshop in Delhi in December 2014. This was organised by the World Bank country office with a selected audience of key individuals from government, NGOs and donor agencies involved in watershed management.

A seminar held in Washington to present the findings from the study attracted a lot of interest and requests to the TTL to provide advice to projects in Haiti and Madagascar based on the lessons learnt from the India watershed projects. The audience for this seminar were carefully targeted using a number of internal distribution lists that covered the three main interest groups for this work: water, agriculture and natural resources and the thematic group on water resources and watershed management. These people were already members of a watershed management community of practice, the TTL is the chair of this group. This provided a ready mechanism to reach out to people who did not necessarily have operational experience in watershed management to be able to share lessons and to influence how the investment portfolio is shaped. These types of focused brown bag lunches attract people with limited time who do not read long analytical documents and only read material when they have to write a final project document. The TTL knowing the operational

¹⁶ Sandeep Dave is now the current joint secretary in Delhi in Department of Land Resources, Ministry of Rural Development and project director for the new World Bank funded Neeranchal Project support to the GOI Integrated Watershed Management Project

¹⁷ presentations for both these design processes were provided to the evaluation team

pressures he and his colleagues operated under could use the most effective mechanisms for addressing their needs to learn in a timely and targeted manner.

Web presence

Three different searches for accessibility and availability of the final study were conducted: 1) PROFOR website; 2) Google scholar; and 3) a general Google web search and Google Books search. The full results of these three searches are provided in Annexe D and Table 4 summarises the results. The study is very difficult to find using any of the searches. The main study is not cited in Google Scholar unless an author search is used and there are no citations. The PROFOR webpage for this activity has not been updated since 2011, and the study is not mentioned on the activity page. The link to the draft mentioned on the second grant activity page work also does not work. PROFOR website needs to ensure it links to the World Bank link to the study (<https://openknowledge.worldbank.org/handle/10986/18636>)

Table 4: Web accessibility of Lessons from Indian Watershed Management Projects

Product	Date of Publication	Google search	Google Books	Google Scholar citations	PROFOR
Watershed development in India: an approach evolving through experience	March 2014	No reference on p.1 (using keywords watershed development India) p.1: 5 th reference (using keywords Watershed development India experience)	No reference on p.1	Searched to p.20 no reference under its title Author search Lobo - reference p.3 Milne + India (reference p.1) Lobo + India (reference p.2) No citations	Very difficult to find the study on the PROFOR website, no draft or final product available Webpage updated in January 2011

OUTCOMES

It is difficult to assess outcomes from the first grant, as the work was not completed during the duration of this grant. However, the second grant was used to finalise the work undertaken in the first grant and so there are now some clear outcomes. Despite the lack of a formal product there was uptake and use of lessons in the design of the follow-on World Bank supported Karnataka watershed project. The lessons were also integrated by the TTL into the design of the Neeranchal programme that supports the national level Integrated Watershed Management Programme of the Government of India (evidence from a peer-reviewer of the Bank supported programmes, as well as the programme director). One of the major lessons that emerged from the study was the need to refocus these programmes on the key element in watershed management – water. The study highlighted the need to redress the imbalance of programmes primarily focused on social outcomes to include technical management of hydrology, since without this focus the social outcomes are compromised over the longer-term. The formalisation and codification of tacit knowledge into explicit, peer-reviewed and publicly available knowledge in published study is an essential part of ensuring that knowledge can be used. Lessons learned by individuals remain just that; it is difficult to convince large numbers of people based only on informal lesson-learning. But this same experience, produced in a formal way through a third party document makes the knowledge more credible and acceptable.

However, because the participants in this study are such key actors in the watershed development arena in India, the tacit knowledge has been used to input to major policy processes. The membership of one of the study consultants of the Planning Commission Working Group on watershed development for the 12th Plan meant he could bring his knowledge from the lesson learning work to these policy discussions. The extent to which he was able to influence these discussions from this particular work, as opposed to all the other experience he has would be hard to assess. Discussions with the chair of this working group indicated that the members drew on a wealth of experience and no-one person or study could be highlighted as having a particular influence.

The delay in the formal publication of the work did hamper its uptake in the World Bank COP and effectively made the dissemination of the work more difficult, as the detail was no longer relevant, since by the time of its sharing it was 4 years out of date. The dissemination was therefore focused on the more general principles that emerged and the demonstration of the use of a robust set of metrics for evaluating watershed programmes that could be easily transferred elsewhere in the world. This BBL has led to direct requests to the TTL to advise on the development of other World Bank funded watershed programmes.

At the completion of the second grant it is expected that there will be additional outcomes including the development of new tools and methods.

OUTCOME RATINGS

	Influencing programmes, policies or policy dialogue	Advancing knowledge /understanding	Developing new tools and methods	Strengthening networks
Rating	Significant (as a result of individual learning and inputs to design processes)	Significant	Not for this grant (but under second grant)	Moderate

IMPACTS AND SUSTAINABILITY

Without the second grant the wider ranging impacts of this grant would not be secure. The draft study would have remained just that and the lessons would have remained ones that individuals involved in the study could have used in their own work. These lessons would remain informal rather

than being formally ratified through a rigorously reviewed and published study and would not have the level of importance that the final study does have.

However, the choice of key individuals with high credibility in India to either conduct the study or be the subject of the study (Karnataka watershed project), as well as having a TTL who has the position to use the lessons in the design of a major new investment by the Bank in India, ensured that the initial grant's findings were embedded into major World Bank funding and thence into government processes. The study was an important input to these processes, it was not the only influence.

VALUE FOR MONEY

The first grant by itself did not deliver value for money. However, both grants together probably did. Due to the problems with the hand-over to a new TTL and their failure to follow through on the initial study, the first grant was not able to deliver the expected outputs and was hindered at a formal level from achieving the higher level of outcomes that was expected. If there had not been a second follow-up grant, this initial work would have had reach only through the individuals directly involved in the study: the TTL who had initiated and guided the work, the Karnataka project director and the director of WOTR. Fortunately the second grant has ensured that the initial work has been formalised through a World Bank study. This was recently presented to a high-level workshop in Delhi and can now be used both by key government actors, to inform their work and that of colleagues, as well as be shared more widely outside India.

In the absence of the PROFOR money however, it would not have been possible to find the funding to conduct the lesson-learning work and it would have been difficult to capture the lessons from the three projects without this formal process. From this learning work the study was able to capture the importance of the monitoring systems developed by Karnataka that could show impacts and so could be built into the new programme. The issue for all three states was not necessarily just the codifying of their lessons, but making it possible to share these lessons with other states in a formal and independent way which was otherwise not possible. The input of these lessons into a subsequent institutional analysis that fed into the design of the Neeranchal project has embedded the initial lessons into the work to be initiated in 9 new states that were not previously part of the World Bank projects and so spread the innovations and practice into these states, potentially positively affecting a large number of people within these states.

CONCLUSIONS

Overall the PROFOR support to this activity has provided a significant contribution to the design of a new state programme of watershed management, as well as to the design of a major national World Bank funded programme that provides support and pilots new approaches that can be taken up by the Gol Integrated Watershed Management Programme. This is now the second largest rural development programme in the world and affects the lives directly of many millions of people.

LESSONS AND ISSUES

Skill sets and status of consultants: for this work the two consultants contracted had two important sets of attributes: 1) extensive experience of the World Bank systems and its watershed projects (an ex-World Bank TTL); and 2) high-profile as the founder director of an influential Indian NGO renowned for its watershed work. This combination of skills ensured that the lessons were more easily acquired through pre-existing trusted relationships as well as being more easily transmitted to key individuals at different levels of government as well as in the development community.

The importance of codifying knowledge: the lesson-learning work was an essential input to improved World Bank investments. Although key individuals with tacit knowledge of the watershed programmes were involved with their design, the capacity to embed and spread this knowledge more widely is reduced unless the knowledge moves from being tacit to explicit. The formalisation of this

knowledge in a credible, peer-reviewed World Bank study has enabled the lessons to be taken into other state programmes in India, as well as taken into other World Bank investment programmes.

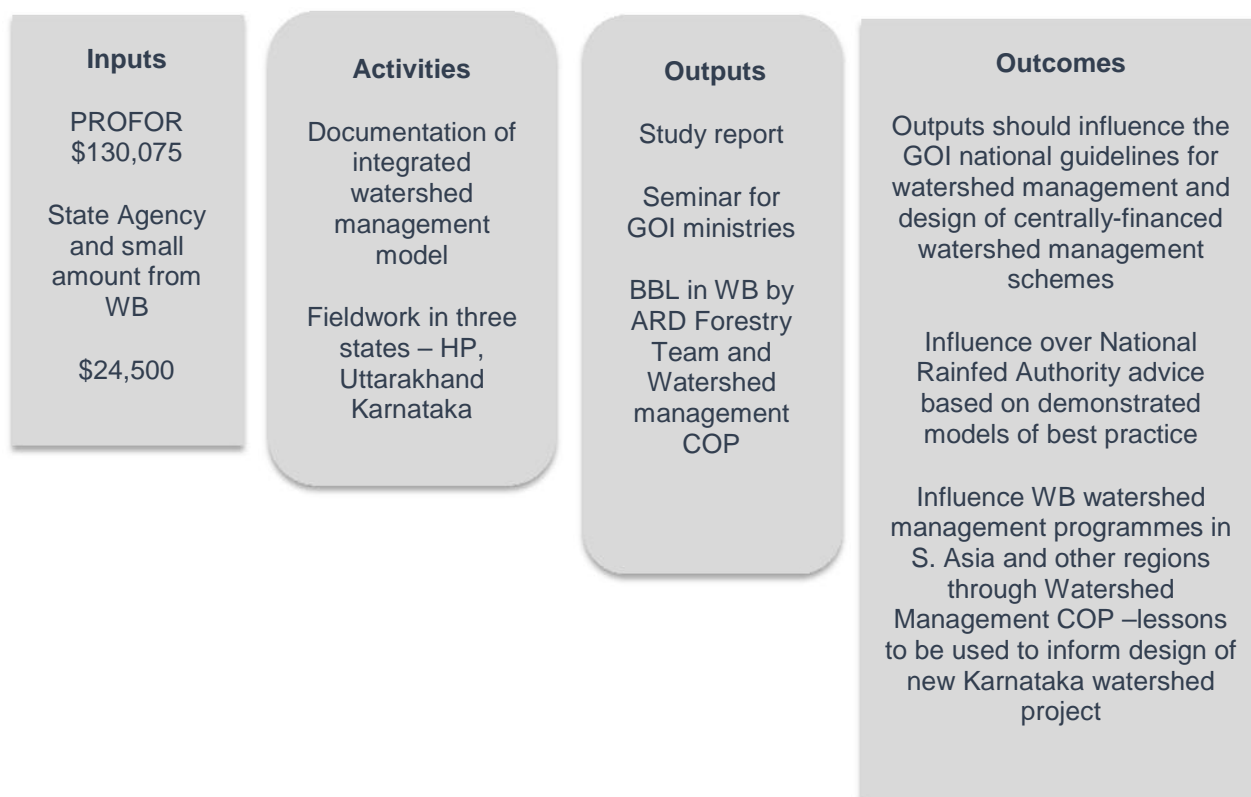
Flexibility and responsiveness of PROFOR fund: in this case the awarding of a second grant to the TTL ensured that the initial work was not lost and could be formally incorporated into an all India government programme.

Fragility of PROFOR funding: PROFOR funding is highly dependent on the quality of the TTL and their continued ability to remain engaged with the work. In this case the change in TTL responsible for the budget led to the failure to deliver on the agreed outputs. This could only be resolved with a second grant. PROFOR needs to retain active management oversight over its grants and ensure this type of failure in grant management by TTL does not occur.

Importance of PROFOR funds for analytical work that can contribute to change in major government programmes: In a highly budget constrained environment in the World Bank for funding analytical work in India, this lesson-learning study would not have been done. The trust funds bring the opportunity to do work that both benefits client countries and at the same time allows the work to be tailored to produce global benefits. The PROFOR niche in the Bank to support this type of knowledge work plays an essential role in building good future investment.

Figure 6: Results chain: Lessons from Indian Watershed Management Projects

Illustrates the intended results of the work and assessment of impact from completion report. In this case there can be no impact from the first grant as it failed to deliver the expected outputs. These were only produced once a second grant was obtained from PROFOR.



Box 4: Selected responses – Lesson from Indian Watershed Management Projects

‘One of the big challenges is the way the Bank learns. As a task team leader in the Bank I didn’t have time for learning, as I was busy full time in my projects, I learnt a lot from them, but did not have time to learn from others’ projects or from others’ experience’ (ex-WB staff member)

‘it was important to look for informal mechanisms that could be used so people who didn’t know about watershed management could have an occasional BBL or be part of a network of people with whom they could have coffee to discuss the issues’ (WB staff member)

‘you may be knowledgeable, but you have your own context for this knowledge, this study was a very valuable input, as when you talk about national plans for India, you have to understand how different India is, its typology, its hydrological conditions. My experience from the first study helped me to better understand these issues, even with my years of experience, the depth of work I did for the first study informed me better and helped me to challenge my assumptions and beliefs’ (consultant on study)

‘there was some new out of the box thinking that came from the learning from the Karnataka programme that we could build into the IWMP, if this learning had not been there then the IWMP would still be like any other programme’ (government staff)

‘I know what I have learnt from Sujala as an individual, but if I have a document with lessons learned this can then be disseminated to a larger audience and can be seen by many people who can pick up and improve upon and incubate these ideas. Even though the study only covers three states, it covers a whole spectrum of different approaches. A study means I can use it to identify where there are weaknesses, and because I am not saying it but the study is, it has greater acceptability and government is more likely to accept it and it becomes incorporated into practice’. (Government staff)

‘This study was a very useful pre-project preparation tool, without trust funds you cannot do this type of work. These trust funds come as a blessing in disguise, they allow projects to be prepared in a more structured way.’ (Government staff)

Impacts of Climate Change on Rural Landscapes in Brazil

Partners	EMBRAPA, UNICAMP, INPE, ICONE
Consultants	
Beneficiaries	
Duration	January 2011 – June 2012
Type of funding	Programmatic
Type of knowledge product	ESW
Total cost	Total cost: \$ 277,000 PROFOR: \$ 131,000 WB Brazil Country Management Unit: \$ 146,000
Location/scale	Brazil
WB Task Team Leader	Erick Fernandes
OBJECTIVES	To provide an operational framework for a broad focus on landscape level and agro-ecosystem resilience to reduce the potential impacts of climate variability and change on society.

Four key integrated and linked interventions are needed in the short term to significantly improve the assessment of climate change impact on Brazilian agro-ecosystems to 2050 and beyond. The key objectives are:

1. To refine the available climate change projections for Brazil via the coupling of global, regional, and local scale modelling currently being tested by the Brazilian National Institute for Space Research (INPE) in Brazil and the regional climate program for South America (CREAS).
2. To integrate the INPE and CREAS suite of tested global (300 km horizontal resolution) and regional models (50 km horizontal resolution) with the state of the art Brazilian developments in Regional Atmospheric Model (BRAMS) that incorporates aerosol and land cover/deforestation/burning feedbacks for much improved local weather and climate (especially rainfall) projections.
3. To make the Brazilian Agro-Eco Zoning Model that is currently used by the Central Bank of Brazil for rural credit programs, climate-smart by integrating the high resolution climate projection outputs from 1 and 2.
4. To make the existing Brazilian Land Use Model (BLUM) climate-sensitive by coupling it with state of the art outputs from 1, 2 and 3 (above) to assess: (a) Climate change induced changes in supply and demand of agricultural commodities at a national level, (b) Changes on the distribution of land use and production (agriculture, forestry, pasture) in Brazil for given supply and demand scenarios, and (c) Economic effects on agricultural and forestry production and profitability. [Concept Note]

BACKGROUND AND CONTEXT

There is growing concern that Brazilian agriculture and forestry sectors are increasingly vulnerable to climate variability and change. For example, under a 'plausible but pessimistic' climate change scenario, the "Economics of Climate Change in Brazil" 2010 study revealed that climate change is very likely to reduce area of cropland with low production risks that are currently used to produce 85% of Brazil's major food and export crops. In addition, the productivity of subsistence crops in north eastern Brazil will also decline. There is also a high probability of an Amazonian (forest) Dieback that will potentially increase fire risk in the Amazon and also negatively impact evapotranspiration and thus rainfall in central and southern Brazil. The projected impacts will be felt as early as 2020 and certainly by 2050. Given that agricultural expansion is currently a major driver of deforestation in Brazil, the projected climate change impacts could have major negative impacts on remaining forests in Brazil. To meet national development, food security, climate adaptation and mitigation, and trade goals over the next several decades, Brazil will need to significantly increase per area productivity of food and pasture systems in central and southern Brazil while simultaneously reducing deforestation, rehabilitating millions of hectares of degraded land for cropping and forest plantations in the Amazon, the Cerrado, the Atlantic forest, and the Pampas.

Because of previous climate modelling and data limitations, there is still significant uncertainty associated with the projections for Amazonian rainfall (timing, seasonality) as well as the magnitude and locations of climate impacts in Brazil over the next 50 years. Due to the multi-decadal response time for adaptation in agriculture and forestry, improved climate change impact assessments are urgently needed to guide policy makers on priorities, geographical targeting (hot spots), and phasing of investments for adaptation and mitigation to climate change. [Concept Note]

IDENTIFICATION, DESIGN AND APPRAISAL

The TTL approached PROFOR with the idea. Brazil was starting to address deforestation and the policies that were necessary (e.g. agricultural credit rules). However, while there was a groundswell of effort to tackle deforestation, there was a lack of hard evidence on the impact of climate change on agriculture. Objective analysis was required. There had been several good studies on the general impact of climate change (e.g. DFID) but these had been limited in scope. Newer models, as well as better hydro-meteorological and land suitability data, were now available.

It was also clear that, although Brazil had extremely competent institutions, they did not necessarily work together. This project could facilitate this at a modest cost.

This was exactly the right time for a study of this type. It responded to current national and international priorities at the time.

IMPLEMENTATION

Implementation of the planned activities was carried out in a timely and efficient manner. The different agencies in the partnership collaborated well in the exchange of data and simulation products necessary for the production of the final synthesis products.

The activity was granted a slight extension. The completion date was extended from April to June 2012.

OUTPUTS

Major outputs during the activity period included:

- (i) A Brazilian multidisciplinary and multi-agency team formed and collaborating on climate change projections and impact assessments on agriculture and forestry to 2050 and beyond.
- (ii) Set of state-of-the-art projections for land use and forest land cover change to 2030 – a time frame that is highly relevant to policy makers and investments in agriculture and forestry.
- (iii) An assessment of distribution of land use and production, based on: (a) projected climate change impacts and production shocks (at a micro-regional level); (b) the economic effects on production, prices and profitability; and (c) the feedback effect of climate change induced variability on distribution of land use; and (d) economic effects on Brazil's GHG mitigation commitments.

A report in Portuguese was published in hard copy after the activity had been completed: Impacts of Climate Change on Brazilian Agriculture (2013). An English version of this report is now in press.

There were no substantive changes in the outputs planned. The original intention was to project impacts to 2050 but due to the complexity of models and increasing uncertainty of the climate and agriculture models beyond 2030, all outputs focused on 2030.

DISSEMINATION

Study findings were presented at a number of conferences. This included (a) the 40th Brazilian National Association of Economists (ANPEC) meeting in December 2012, and (b) The Belmont Forum + GR Research Centres workshop on Food Security and Land Use Change organized by FAPESP together with the University of São Paulo's Centre for Nuclear Energy in Agriculture (CENA/USP) on December 17-18, 2012.

A formal launch event and press conference on the findings of the study was considered by the CMU. However, it coincided with local elections and there was no great appetite within the government or agencies for a launch event.

A glossy hard-copy report in Portuguese was distributed in Brazil. An English version (funded by the Agriculture GP) is at the editing stage. The report acknowledges that 'the work was funded by PROFOR' and carries the PROFOR logo among others.

OUTCOMES

In addition to confirming the results from previous climate change impact studies that projected significantly negative impacts on Brazilian crops to 2020 and 2050, the study findings help to further extend the knowledge base not only on the extent of impacts to different crops but also the level of impacts in the different regions of Brazil. The review synthesis from this report suggests that within the next decade, Brazilian agriculture will already be dealing with a significant level of climate induced crop and livestock productivity stresses.

The findings of this study are being incorporated by EMBRAPA into the EMBRAPA/UNICAMP Agroecozone Model to improve the climate projections that underpin the national rural credit and insurance programs in Brazil. It emerged during the activity that the existing crop model was not working well. The study has helped to update the model used by the credit scheme. According to the Completion Report and the TTL, this means that the study has immediately begun having far reaching operational and policy implications in Brazil.

The wider contribution of the study on policy and practice in Brazil, and on the dialogue with the World Bank, is difficult to assess because of the mass of other climate change analysis completed in the same period and since. However, the report underpinned the need for central and state governments to address the shift in the southern grain belt and the implications of this for transport infrastructure. The report provides some substance to the discussions on these issues between the World Bank and different levels of government.

More generally, this study has reportedly helped prepare the ground for a big push on landscape programmes within the World Bank. It is a good example of how important data and analysis is for the landscape approach. Realising 'climate smart landscapes' requires this type of study.

OUTCOME RATINGS

	Influencing programmes, policies or policy dialogue	Advancing knowledge /understanding	Developing new tools and methods	Strengthening networks
Rating	Significant	Moderate	Some	Some

IMPACTS AND SUSTAINABILITY

New knowledge was produced that was clearly relevant and immediately useful. However, the extent to which the application of this knowledge has or will lead to different social, economic or environmental outcomes cannot be judged.

The fact that the WB Agriculture Global Practice are funding an English version of the report will ensure wider impact and greater sustainability than would have been the case if the report had remained in Portuguese only. The experiences from Brazil are highly relevant for other countries where similar work is on-going.

VALUE FOR MONEY

In the opinion of the TTL the study would probably not have happened without the PROFOR funds. The PROFOR funding helped leverage funding from the Brazil CMU, which provided around half of the funds required.

It is not possible to assess the VFM of this activity. Implementation appears to have been efficient and effective. Whether the eventual value of the resultant changes in policy and practice in Brazil and elsewhere exceed the costs incurred cannot be assessed.

CONCLUSIONS

This study was very timely, relevant and influential. There was strong national interest and support from the CMU for the work. The work was carried out effectively and efficiently by a partnership of highly reputable national institutions. This gave the report credibility and ensured local uptake of the findings.

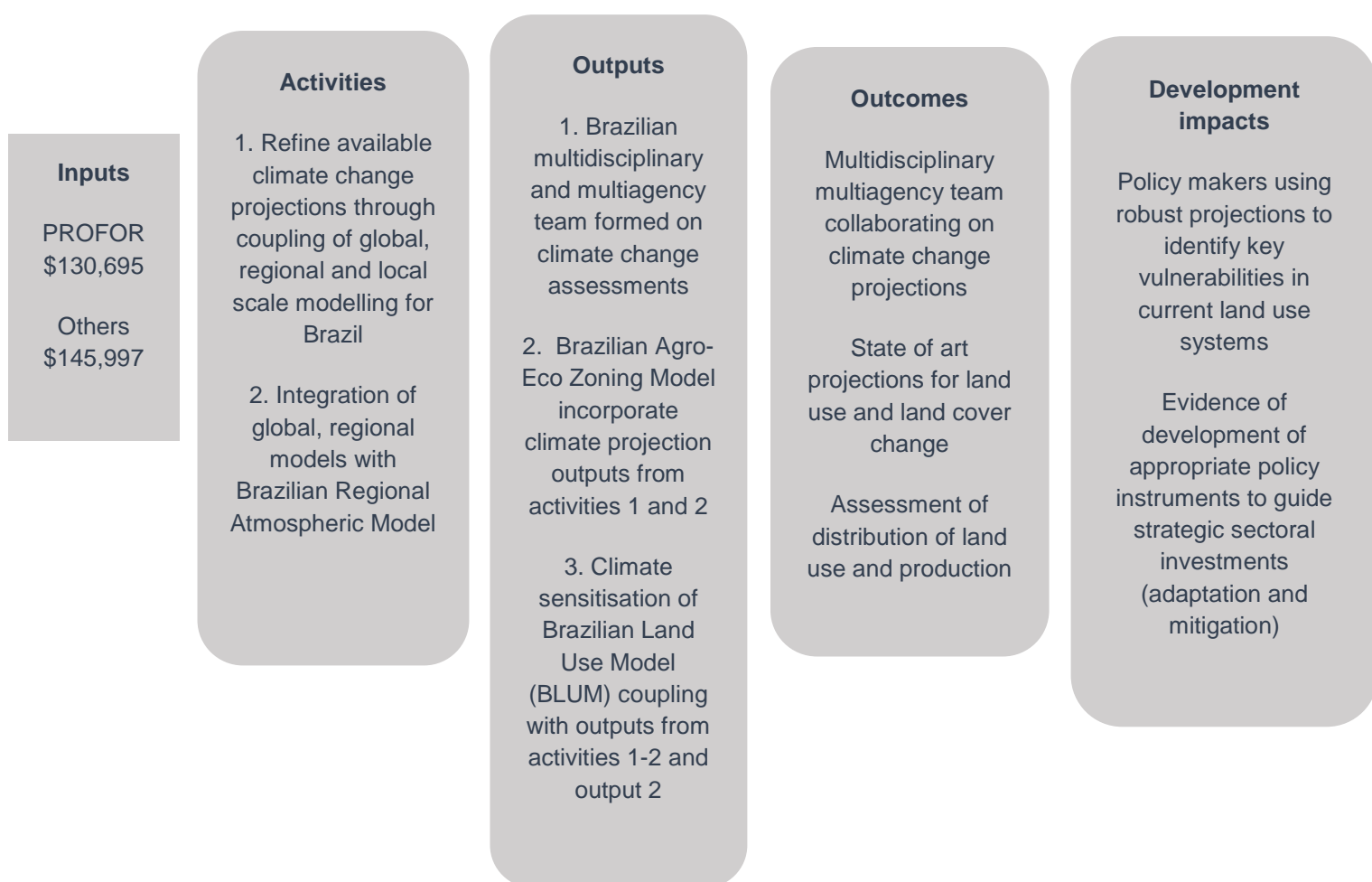
An additional benefit of the activity was the way in which it brought national institutions together. Many of these were not used to working with each other

One notable outcome of the work – unpredicted at the outset – was the immediate use of the analysis in updating the crop model used for assessing rural credit applications. This has meant that the work was immediately useful.

LESSONS AND ISSUES

A number of factors have contributed to the success of this activity: it was timely and relevant; responded to a strong national demand; was significantly co-funded by the CMU; and was effectively implemented by a strong consortium of highly reputable national institutions

Figure 7: Results Change - Impacts of Climate Change on Rural Landscapes in Brazil



Scaling up Renewable Charcoal Production in Brazil

Partners	
Consultants	
Beneficiaries	
Duration	August 2011 – June 2012
Type of funding	Just-in-time
Type of knowledge product	PT (Brazil Forest Investment Program)
Total cost	Total cost: \$ 113,000 PROFOR: \$ 48,000 World bank Administrative budget: \$ 64,000
Location/scale	Brazil
WB Task Team Leader	Garo Batmanian
OBJECTIVES	
<p>The purpose of this study was to identify institutional and financial arrangements required to mainstream forest plantation business models in support of potential programmatic CDM projects. The CDM projects were aimed at GHG emissions reductions and net GHG removals in the forestry and iron supply chains in the state of Minas Gerais.</p>	
BACKGROUND AND CONTEXT	
<p>Charcoal is one of the main sources of energy used in the production of pig iron for steel in Brazil. The vast majority of the current charcoal production is from unsustainable and often illegal harvest of native forests, leading to severe environmental degradation and deforestation. However, there have been successful business cases of forest plantation for charcoal production in Brazil, including one Clean Development Mechanism (CDM) project financed by the Prototype Carbon Fund in Minas Gerais. Expanding the numbers of rural properties engaged in the sector focusing on expanding the area of forest plantations for charcoal, on idle or degraded pasture land, would reduce the pressure on native forests in Brazil. The alternative for plantations is basically either damaging to the environment due to the production of charcoal from deforestation of native forests (legal or illegal), or relying on coal/coke at very favourable conditions.</p> <p>However, barriers have prevented wide adoption of forest plantations for charcoal. As identified in the Low Carbon Study for Brazil, the main barriers are lack of credit to finance the initial production costs (first income revenue usually is generated after 7 years of plantation), difficulties to access credit (unlike for agricultural transactions, forest plantation are often not accepted as collateral for loans), higher transaction costs relative to deforestation and coal production (planted forest activity has a cycle of 14-21 years of production, is labour intensive, and high costs of land management and environmental licensing), inefficient technologies for carbonization process (contributing to the emission of GHG, including methane), unclear agricultural and environmental regulatory framework to forest production, weak institutional arrangements, to name a few.</p> <p>Minas Gerais has 62 pig iron mills. The state is the largest national producer of steel and iron, responsible for 60% of the national production. Minas Gerais approved the Law 18365/09 which virtually bans the use of charcoal from deforestation by 2018, as 95% charcoal consumed in the state must come from plantations. In order to supply the industry with charcoal from plantations MG should have about 1.5 million ha under plantations.</p> <p>The Bank signed a Memorandum of Understanding with Minas Gerais and KfW on October, 2010. The objective of the MoU is to assess the potential development of a programmatic CDM Program to stimulate GHG emission reductions and net GHG removals in the forestry and iron industry supply chains in the State of Minas Gerais. Under the MoU, the Bank and State of Minas Gerais would support</p>	

complementary studies to identify actions required to alleviate the barriers to the increase of production and use of renewable charcoal in the iron and steel making process, mainstreaming the Plantar business model.

The studies to be supported by this proposal are key building blocks to Bank's strategy for Brazil of promoting a low carbon economy. According to the Brazil Low Carbon Country Study, the displacement of non-renewable charcoal to renewable charcoal by 2017 and the use of charcoal to produce up to 46% of the pig iron and steel by 2030, would potentially mitigate 62 Mt of CO₂ between 2010 and 2030. This would represent 31% of all emissions reductions expected from the steel industry and an important contribution to the achievement of the Brazilian government's national target to reduce by 39% the country's GHG emissions by 2020. [Concept Note]

IDENTIFICATION, DESIGN AND APPRAISAL

The activity was identified by the then TTL responsible for the original (P075871) and planned (P120637) Plantar Green Pig Iron project, and for the environmental aspects within the proposed Third Minas Gerais Development Partnership Development Policy Loan (DPL) in Minas Gerais. The State had recently passed laws and regulations requiring 95% of raw wood materials for charcoal production to be supplied from cultivated forests by 2018. However, the area of new plantation had decreased from about 200,000 hectares in 2008 to less than 100,000 hectares in 2012. The PROFOR activity was needed to analyse why this was happening and to work out how the PLANTAR business model could be mainstreamed.

IMPLEMENTATION

Overall implementation performance was satisfactory. The consulting firms hired in mid-2011 to carry out the studies were already leading the implementation of overall activity within Minas Gerais and were well qualified for the task. All the tasks and outputs were implemented according to the agreed terms of reference and timetables.

OUTPUTS

All the expected outputs were produced. These were: (i) Inception report and work plan (ii) Stakeholder workshop (iii) Survey and qualitative analysis (iv) Final report and recommendations.

According to the analytical studies and stakeholder inputs, the key findings include: (i) The potential for scaling up the use and production of renewable charcoal in Brazil through the design of programmatic CDM arrangement is very significant (subject to the Kyoto Protocol). However to ensure sustainability key market failures and lack of attractiveness to engage the private sector must be addressed. (ii) Successful business cases of forest plantation for charcoal production in Brazil, including the CDM project financed by the Prototype Carbon Fund in the State of Minas Gerais, are important pilot experiences to guide replication. There is a general perception that CDM projects may be an important tool to offer incentives for large-scale adoption of forest plantations for charcoal.

DISSEMINATION

The outputs of the PROFOR activity had limited internal distribution within Brazil. The final reports from the activity were not intended for public use and were not printed. They were distributed electronically within the national/state governments and the World Bank.

OUTCOMES

Two outcomes were envisaged: (i) key government agents and financial institutions (private and public) engaged in ensuring the design of efficient institutional and financial arrangements; and (ii) a proposal for institutional development strategies and secure financing mechanisms required to enhance the renewable charcoal production to be implemented in the State of Minas Gerais that would enable designing a Programmatic CDM initiative to promote 1.5 million hectares of plantations.

Both outcomes were achieved. The basic framework for a programmatic CDM initiative was approved by the State government.

The PROFOR activity provided a significant input to the early implementation of the Plantar Green Pig Iron Project which was approved in the same month as the PROFOR activity (August 2011). This aims to demonstrate that the combination of the purchase of temporary RECs from Afforestation and Reforestation and up-front payment of future RECs is an attractive and feasible financial model for Low Carbon production in the pig iron sector and widely replicable within the pig iron sector in Minas Gerais and Brazil. The lessons learned under the PROFOR activity influenced the project going forward.

The PROFOR activity also contributed to the final design of the \$450 million Minas Gerais DPL (P121590) which was approved in July 2012. 20% of the DPL was marked as 'environmental policies and institutions' and Policy Area 3 included measures to encourage forest plantations to charcoal for the pig-iron industry.

OUTCOME RATINGS

	Influencing programmes, policies or policy dialogue	Advancing knowledge /understanding	Developing new tools and methods	Strengthening networks
Rating	Significant	Some	n/a	n/a

IMPACTS AND SUSTAINABILITY

The PROFOR activity has contributed to two operations financed by the World Bank. One of these (the Plantar Green Pig Iron project) is still ongoing. The other (the Minas Gerais DPL) closed in January 2014. According to the DPL ICR, the plantation component has 'underachieved'. Actual planting was 62,227 hectares in 2013 compared to a baseline of 94,325 hectares and a target of 108,474, a decrease of 35% over the life of the project. The main reasons for this were (i) the unexpected declaration that middle-income countries were ineligible for CDM payments under the new phase of the Kyoto Protocol, and (ii) the continuation of the unfavourable business environment for plantation investment.

The PROFOR activity was predicated on the continuation of a facility (CDM) for which Brazil is no longer eligible. The experience of the DPL suggests that the prospects of positive impacts (eg. increased plantation area) from the PROFOR activity are limited.

VALUE FOR MONEY

The favourable implementation performance would suggest that the activity was effective and efficient. The outcomes in terms of influence on two World Bank operations were also positive. However, there is no evidence of positive impacts from one of these (new plantation area has decreased rather than increased), and the unexpected change in the new phase of the Kyoto Protocol means that the premise on which the PROFOR work was based no longer applies in Brazil. The latter was unforeseeable but unfortunately means that the PROFOR activity is unlikely to deliver value (impact) for money.

CONCLUSIONS

The PROFOR activity was a success at output and outcome level. However, unexpected changes in the terms of the new phase of the Kyoto Protocol, combined with a continuation of the unfavourable business environment for plantation investment, means that positive development impacts are unlikely. The lack of any published outputs means that any knowledge impacts will also be very limited.

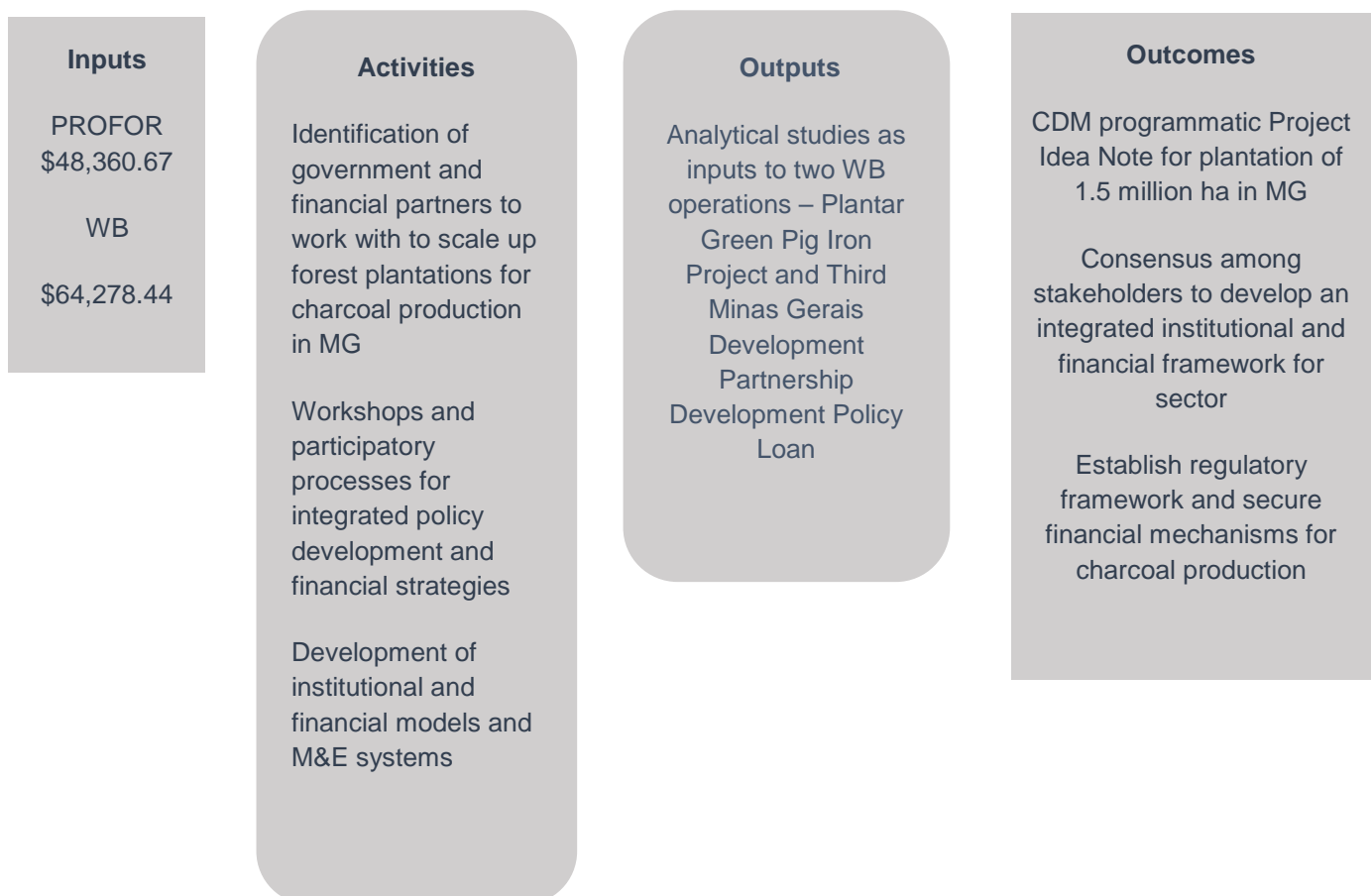
LESSONS AND ISSUES

Many success factors were present in this activity: local demand; CMU interest and support; expert consultants; and a clear uptake pathway in terms of World Bank operations.

The activity was, however, dependent on the continuation of a particular policy mechanism (the CDM) in Brazil. While the change in the CDM eligibility rules was arguably unforeseeable, activities such as this one that depend on the continuation of a particular national or international policy mechanism are more risky.

This activity provides a clear example of a case where influencing a World Bank operation is not, by itself, a guarantee of success or positive social, economic and environmental impact. The latter depends on the performance of the World Bank operation and the extent to which that operation generates social, economic or environmental benefits. Neither can be simply be assumed.

Figure 8: Results Chain – Scaling up renewable charcoal production in Brazil



4. OVERVIEW OF EVALUATION FINDINGS

Section 3 has provided detailed individual reports on each of the eight PROFOR-supported activities. The aim of this section is to provide an overview of the findings from the eight activities as a group. It is important to stress that this group is not necessarily representative of the cross-sectoral theme, and is almost certainly not representative of PROFOR as a whole. Lessons and issues raised are discussed in the concluding section of this report (Section 6).

Identification, design and appraisal

The activities evaluated cover a diverse range of activities with few common elements. They cover all regions, a range of knowledge product types, and all three PROFOR funding windows. The activities span a range from those that would not have happened without PROFOR support (LCG, Brazil CC) to those where PROFOR made a relatively small contribution to activities that would have gone ahead anyway, or had even started. The PROFOR contribution ranged from \$48,000 to \$167,000, and comprised between 18% and 91% of the total project cost. Four of the activities were marked as primarily 'cross-sectoral' in theme, and four as 'livelihoods'. Two of the activities involved watershed investments. Beyond that there is little in common between these eight activities (Table 5).

Table 5: Summary of activities funding, geographical coverage and product type

Primary thematic area	Activity	Product Type	Region	Funding window	PROFOR cost \$	PROFOR cost %
Cross sectoral	Economic growth and drivers of deforestation in the Congo Basin	ESW	AFR	Programmatic	122,000	18 %
Cross sectoral	Biochar systems for smallholders in developing countries	KP	Global LCR	Just-in-time	48,000	60 %
Cross Sectoral	Impacts of climate change on rural landscapes in Brazil	ESW	LCR	Programmatic	131,000	47 %
Livelihoods	Scaling up renewable charcoal production in Brazil	PE	LCR	Programmatic	48,000	43 %
Livelihoods	Targeting watershed rehabilitation investments in Turkey	PT	ECA	Just-in-time	140,000	89 %

Cross Sectoral	The role of forests in low carbon growth strategies	TA	Global	Just-in-time	50,000	91 %
Livelihoods	Lessons for Indian watershed management projects	PE	SAR	Programmatic	130,000	83 %
Livelihoods	Forests, Fragility and Conflict	KP	Global	Strategic	167,000	85 %

One possible significant difference is between those activities initiated and managed by the global anchor, and those initiated and managed by regions/country offices. The latter can have a more direct impact on operations in the country concerned, but less impact elsewhere. Anchor-led activities can have a more indirect impact on a wider range of operations, provided they have continued ownership within the World Bank.

All of the eight activities reviewed were relevant and justified PROFOR support. Indeed, the majority of the eight activities supported by PROFOR were assessed as important and timely.

Design and appraisal issues could not be evaluated in the majority of cases due to the lack of documentation (e.g. decision minutes and peer reviews), but no significant issues were found. However, a number of lessons with design implications are highlighted in Section 6.

It was also not possible to draw any detailed conclusions about the effects of the types of funding window used and the type of knowledge product produced on the outcomes of the activities. This is because the activities were not selected to look at any causal linkages of this nature. Further work would be required to assess these linkages based on an analysis of the whole cross-sectoral portfolio. The activities for this review roughly reflect the distribution of funding types and knowledge products seen for the whole cross-sectoral portfolio.

Implementation

The choice of consultants proved to be an important factor in 6 of the activities. In 3 cases the consultants had extensive experience of World Bank operations and/or had respected local profiles (Brazil Climate Change; India watersheds; Biochar). This proved highly beneficial. Three of the activities encountered problems with some of the consultants hired to carry out the work (Turkey watersheds; Low Carbon Growth; Forests and Fragile States), although in the last case the three lead consultants were excellent.

Three of the activities suffered from changes in the Task Team Leader (TTL) responsible for the activity (Turkey watersheds; India watersheds; Biochar). While this is unavoidable, the damage that this can do to the activity suggests that this warrants additional management attention from PROFOR when it happens.

All of the 8 activities needed to be extended. On average the activities took 65% longer to complete than estimated. This suggests that PROFOR is systematically under-estimating the time required to complete activities, and is not managing the activities to ensure that the outputs are

produced in a timely manner. Delays in the production of the final report have reduced the potential value of the activity in three cases (see Outputs and dissemination below).

Activities did not always work out as planned. This is to be expected. There were cases of activities completing before they had delivered their intended outputs, and those that required additional time and resources for dissemination that could not necessarily have been foreseen. In one case (India watersheds), PROFOR responded flexibly with a second grant, and in two other cases (Brazil Climate Change; Biochar), other parts of the World Bank stepped in with additional funds.

Outputs and dissemination

All of the activities reviewed have produced interesting and potentially useful outputs. Workshops and informal channels have been used effectively in many cases, as have interim reports in one case (Congo). The final report of the Congo activity has also proved to be important in raising awareness of the work. Tacit knowledge produced by the activities has been useful and influential (e.g. Low Carbon Growth; India watersheds).

However, reporting and/or dissemination has been a significant issue in five of the eight activities reviewed¹⁸. In two cases (Biochar; India watersheds), the long delay in the formal publication of the report has hampered dissemination and uptake, and reduced the ultimate value of the activity. In one other case (Low Carbon Growth), the final report has still not been produced two years after the activity was completed. The Turkey watersheds activity has not produced a final report. The idea of a PROFOR Policy Brief based on this activity was not pursued.

The published outputs of the Forests, Fragility and Conflict activity are considered to be of high quality. But, despite an active dissemination strategy, the work is not as well-known as it should be among some key audiences. This has limited its potential impact.

Using different Google-based searches, accessibility of some of the products of the activities is limited. In addition, the PROFOR website has not been updated for several of these activities, as a result it is difficult to directly access some of the products through the website.

Outcomes

All of the activities have produced positive outcomes, although these are limited in the case of Turkey watersheds. As detailed in Section 3 above, five of the eight activities are assessed to have produced significant outcomes (Congo; India watersheds; Biochar; Brazil climate change; Brazil charcoal). Table 6 below provides a summary of the scores by outcome area.

¹⁸ No published reports were planned or produced in another of the activities (Brazil charcoal).

Table 6: Outcome summary scores

Key areas of contribution	Significant	Moderate	Some	Not applicable
Influencing programmes, policies or dialogue	4		4	
Advancing knowledge / understanding	3	2	3	
Developing new tools and methods	1	1	2	4
Strengthening networks		2	1	5

There appears to be an important difference in immediate outcomes between global and national activities. Three of the four national activities (India, Brazil climate change, Brazil charcoal) were clearly demand/operation-led and had a direct influence on World Bank and government operations and/or dialogue. More indirect/diffuse influence at national or global level can be achieved – as in the case of the Biochar and Congo activities - but the extent of the contribution is more difficult to assess.

Impact and sustainability

The evaluators were not able to identify any evidence of development impacts from the eight activities. This is not unexpected. All the activities have only completed relatively recently, and it will take time for the policies and programmes influenced to generate development impacts. Identifying such impacts would require a different evaluation approach, including country visits, and even then it is doubtful whether impacts attributable to PROFOR alone could be identified with any precision or certainty.

In one case (Brazil charcoal) PROFOR appears to have made a positive contribution to one component of a World Bank programme. However, the component itself was not a success. According to the Implementation Completion Report (ICR), plantation area has decreased rather than increased and the unexpected change in the new phase of the Kyoto Protocol means that the premise on which the PROFOR work was based no longer applies in Brazil. The latter was unforeseeable but unfortunately means that the PROFOR activity is unlikely to deliver positive development impacts in this case. This is a good example of an otherwise successful PROFOR activity that may not deliver the development impacts expected if the programme it is informing does not succeed. A positive PROFOR outcome (policy or programme influence) does not guarantee positive development impact.

The Forests, Fragility and Conflict activity provides a similar example. Despite the high level of interest and the high quality of the published PROFOR outputs, uptake of the results in the World Development Report (WDR) was limited, and the WDR itself has not had major influence. Traction inside and outside the World Bank has been limited. This may be changing and there is still scope for PROFOR to exploit the high level of interest by funding a short briefing note and targeting this

at some of the wider audiences that could benefit from this work. This could enhance the impact and sustainability of this activity.

Positive follow-up bodes well for the sustainability of some of the other activities. There is a large follow-on project for the Congo Basin study, the Indian Watersheds work has influenced the design of a major Indian watersheds programme, and an English version of the Brazil Climate Change study is to be published with support from another division of the World Bank. Conversely, late and non-existent reporting has negatively affected the reach and sustainability of some of the other activities.

5. ASSESSING VALUE FOR MONEY

One of the objectives of the consultancy was ‘to identify practical metrics and means, including value for money indicators that PROFOR might use to assess its effectiveness moving forward’. In view of the progress already in train with the M&E system¹⁹, it was agreed that this work should focus on possible value for money (VFM) indicators for PROFOR. The consultants were not asked to make a judgement on whether PROFOR as a whole represented good VFM, although the question was attempted in the individual activity evaluations. The limitations of what can be said with any certainty about the VFM of each of the activities confirms the challenge that PROFOR faces more generally in trying to measure and report on VFM.

VFM in practice

A review of the practice of VFM reveals two characteristics. First, there are variety of definitions and approaches to measuring and managing VFM, and second, successful applications of VFM approaches and indicators in knowledge/research programmes do not appear to exist.

Unlike many monitoring and evaluation terms (relevance, effectiveness, efficiency, etc.) there is no universally agreed definition for VFM. Box 5 below contains a number of alternative definitions.

Box 5: Alternative definitions of Value for Money

‘Good value for money is the optimal use of resources to achieve the intended outcomes’. UK National Audit Office

‘The optimum combination of whole-life cost and quality (or fitness for purpose) to meet the user’s requirement. It can be assessed using the criteria of economy, efficiency and effectiveness’. OECD

‘Assesses the extent to which the programme has obtained the maximum benefit from the outputs and outcomes it has produced within the resources available to it’. IEG, World Bank, 2007.

¹⁹ Monitoring and Evaluation Framework for KNOWFOR. Attachment 3 – PROFOR M&E Plan. Clear Horizon Pty Ltd. January 2015

‘Maximising the impact of each pound spent to improve people’s lives’. DFID, 2011.

‘The best use of resources to achieve the desired impact’. UK Independent Commission for Aid Impact, 2011

‘The relationship between the money that enters the results chain and the resulting outcomes and impact’. DFID, 2013

One consequence of this variety of definitions has been a certain degree of confusion. As ITAD have commented: ‘value for money suffers from being a phrase that is more used than *understood*²⁰. It is also a phrase that is more used than applied. The lack of an agreed definition does not help, but the main reason why there has been so little application is because it is difficult. The fact that there is so little application in hard-to-measure programmes - even those supported by VFM champions such as DFID – demonstrates this. Even the World Bank Independent Evaluation Group (IEG) has a VFM indicator labelled *<to be developed>* in its latest results management framework.

Two conclusions follow. First, programmes such as PROFOR cannot rely on best practice from elsewhere. This does not yet exist. PROFOR needs to develop and test its own approach to assessing VFM, preferably with its partners in KNOWFOR. Second, to the extent that there is consensus, it is that VFM is a judgement based on a variety of criteria (e.g. economy, efficiency and effectiveness). VFM is very unlikely to be reducible to a single indicator for hard-to-measure programmes such as PROFOR.²¹

VFM indicators

VFM indicators can be classified in three ways²²:

- level: input, output, outcome or impact
- type : monetary, quantitative and qualitative
- measurement: benchmarked, comparative and standalone

Ideally, an overall judgement about the VFM of PROFOR needs to be based on a range of criteria (economy, efficiency and effectiveness) across all the **levels**. However, the reality is that measures relating to outcomes and impacts are likely to be viewed as more important, and management resources are scarce. Given this, and the difficulties associated with measuring impacts, the priority focus of any VFM initiative for PROFOR should be at or near the outcome level.

The choice of **type** of indicator depends on what is available at reasonable cost. Monetary and quantitative indicators tend to be preferred because of their supposed greater objectivity and precision, but well-crafted qualitative indicators (as now used by PROFOR in its M&E rubrics) are acceptable.

²⁰ Better Value for Money – An Organising Framework for Management and Measurement of VFM Indicators. Barr, J. and Christie, A. ITAD 2014

²¹ Single indicators from cost-benefit or cost-effectiveness analysis can be produced for more measurable programmes, such as health or education.

²² ITAD 2014 op cit

ITAD identified three types of VFM **measurement** indicator:

- Benchmarked: compares programme achievements with similar achievement in other programmes.
- Comparative: shows progress over time (eg. years) or space (eg. regions)
- Stand-alone: what has been achieved within a certain reporting period (eg. 2014). These are one-off measures.

Benchmarked indicators face a familiar problem: finding a similar programme against which PROFOR could be benchmarked. Benchmarking needs to compare like with like. While some indicators may be common and comparable between knowledge programmes (eg. number of report downloads), all knowledge programmes are different. Although all part of KNOWFOR, PROFOR, CIFOR and IUCN are very different. Benchmarking does not have much potential for this reason.

Stand-alone measures - such as the 1:12 ratio used in the 2013 PROFOR Annual Report – have potential if they are both accurate and meaningful. For example, a stand-alone figure of 18,782 website visits is accurate but not particularly meaningful. Is that a lot or a little? The 1:12 ratio (\$1 of PROFOR support can inform \$12 of World Bank investment) is potentially more meaningful, but depends crucially on assumptions used in its calculation. In the opinion of the evaluators, it is not possible to calculate this ratio with any reliability based on the experience of the eight activities reviewed. Cost-benefit ratios would be another example of a meaningful stand-alone VFM indicator that cannot be calculated with any accuracy in the case of PROFOR.

Comparative measures that track key outcome (or intermediate outcome) measures over time represent the best option for PROFOR. While not providing a complete answer to the question '*is PROFOR good VFM?*', or an answer to the question '*is PROFOR better VFM than alternative programme X*', such measures could at least help to answer the question '*is PROFOR's VFM improving?*'. None of these questions can be answered with any certainty at present.

Proposed VFM scorecard

A comparative approach to VFM is worth trying and would, if it worked, represent a significant improvement on the current situation. The proposed approach is as follows:

- Identify a mixed set of reliable and feasible outcome indicators, or proxy indicators plausibly connected with outcomes.
- Track these over time on an annual basis on a VFM scorecard.

The identification and testing of the indicators can only be done by the PROFOR secretariat, although it might be worth coordinating this exercise with the other KNOWFOR partners to see if some comparable indicators can be agreed. Table 7 below provides an example of the type of scorecard can could be developed and used. The actual indicators used would almost certainly be different from the examples given. The PROFOR team are best placed to develop these.

The VFM scorecard proposed differs from the proposed results framework currently under development in two key respects. First, the indicators are different. Those in the proposed results framework are primarily at output level or depend on the proposed Uptake rubric²³. Clearer

²³ This proposes to rate activities according to whether they are 'above expectations', 'meet expectations', or 'below expectation' according to specified criteria.

outcome-level indicators would be preferable. Second, the VFM scorecard tracks the indicators over time, which most PROFOR reporting does not do.

The VFM scorecard includes a simple denominator at the bottom: the total annual cost of PROFOR. This is unlikely to change dramatically from year to year but provides the ‘money’ element of VFM. It shows what the outcomes achieved cost, and reveals whether these outcomes are being achieved for the same, increasing or decreasing cost. However, it is not suggested that the indicators be actually divided by the total cost. As has been emphasised, VFM is a judgement. The VFM scorecard merely provides the observer with a time series of outcome-related indicators, and a time series of the costs, on a single side of paper.

The actual indicators to be used in the scorecard need to be developed and piloted by PROFOR. For example, with an activity cycle of 6-24 months, when should the indicators be measured? One possible solution would be to, in effect, preface each of the indicators with the phrase ‘For activities completing in the last X months ...’ It would be best if X was 12 (months), but it might have to be 18 or 24 to allow for lagged outcomes. These and other issues will have to be worked out by PROFOR, ideally with its KNOWFOR partners and with external assistance if required.

It is important to emphasise that the idea of a VFM scorecard is innovative. It is not a complete solution to the challenge of measuring VFM within PROFOR. However, it may at least allow a more informed judgement to be made than is currently possible. Over time, some of the indicators will increase, some may be flat, and some may even decline. The total cost of PROFOR may also change over time. This scorecard will allow PROFOR to make an informed judgement about whether, overall, the balance between the value produced (as measured by the mix of indicators) and the money spent is improving.

Table 7: VFM scorecard example

	Indicator	2015	2016	2017
OUTCOME TYPE				
Influencing Programmes	Value of [new/current] World Bank loans directly informed by PROFOR activities.			
Influencing Policies	Number of new cases of national policies/regulations in developing countries directly informed by PROFOR outputs			
Influencing Dialogues	Number of multilateral dialogues directly informed by PROFOR outputs.			
Uptake of new tools and methods	Number of peer reviewed PROFOR tools/guidance notes downloaded by policymakers/practitioners in developing countries.			
Knowledge Uptake	Number of peer reviewed PROFOR reports downloaded by policymakers/practitioners in developing countries.			
Knowledge Uptake	Total PROFOR website visit time by users in developing countries			

Advancing Knowledge	Number of new citations of PROFOR supported reports.			
Networks Strengthened	Number of attendees by Global Practice at World Bank seminars where PROFOR findings were presented.			
Networks Strengthened	Number of attendees by type [WB/non-WB/developing country] at international workshops where PROFOR findings were presented.			
COSTS				
	PROFOR expenditure			

6. CONCLUSIONS, LESSONS AND RECOMMENDATIONS

This is an evaluation of eight purposively selected PROFOR-supported activities. It was not designed to be, and has not been, an evaluation of the cross-sectoral portfolio, still less an evaluation of PROFOR as a whole. The time and evidence available for this evaluation has been limited. Caution needs to be exercised in drawing lessons and recommendations from a study of this nature.

All of the eight activities were relevant, and most were timely and important. All produced interesting and potentially useful results, as well as positive outcomes. Five of the eight activities have produced significant outcomes in one or more of the following areas: influencing programmes, policies or dialogue; advancing knowledge/understanding; and developing new tools and methods. It is too early to assess possible development impacts.

Many of the activities show the value of the particular niche occupied by PROFOR within the World Bank: within but not of the Bank; all aspects of forests not only those related to climate change. The pressure to fund large and simple programmes with minimal transaction costs does not favour forestry initiatives. Small, higher risk knowledge activities without immediate operational use are similarly difficult to fund. In both contexts, PROFOR provides important 'venture capital' for initiatives that keep non-climate change forestry issues 'on the agenda' nationally and internationally, and for innovative ideas that cross sectoral boundaries. Cross-sectoral ways of working as a principle for the PROFOR fund are increasingly important, particularly given the nature of land-use changes and pressures on forest resources.

The restructuring of the World Bank is a positive opportunity for PROFOR. The restructuring into global practice groups (GPs), as well as the emphasis on use of knowledge and evidence and the performance incentives to encourage cross-sectoral working all provide an important opportunity to capitalise on PROFOR's ways of working that have been developed under this 'cross-sectoral theme'. PROFOR can cut across the new GPs and cross-cutting solution areas. This provides a clear tactical way forward for positioning PROFOR within the new Bank structure. The risk-taking ability of PROFOR is very important to maintain, as is its ability to sponsor new 'out of the box'

ideas. The knowledge focus of the Bank is important²⁴ and PROFOR can help the Bank to capitalise on this by seeding work that leads to mid to long-term business development (biochar being a good example of this). It also underlines the importance of continuing to work with client-facing TTLs as they know what the client wants and the best forms in which to deliver it.

A question raised by a number of the activities evaluated is ‘where should PROFOR’s responsibilities begin and end’? Some of the activities would have benefited from a more active and continuing role – and sometimes additional funds – from PROFOR. TTLs have many demands on their time and may not always have an interest in reaching all audiences. PROFOR needs to take a more proactive role in the communication of the knowledge outputs, and the tailoring of these to different audiences, if it is to maximise the returns on its investment and avoid the perception that it is ‘just a fund’.

PROFOR recognises that it needs to improve the way in which it measures and reports on its value for money (VFM). This is not a simple issue. There are a variety of definitions and approaches to measuring VFM, and no examples have been found of knowledge/research programmes where VFM is being successfully measured. However, it is generally accepted that VFM is a judgement that needs to be based on multiple indicators at different levels. It is very unlikely that it can be reduced to a single indicator in the case of programmes like PROFOR.

The solution proposed for PROFOR is innovative but relatively simple: a VFM Scorecard. Tracking a few key outcome-level indicators (or close proxies) over the time would allow PROFOR to answer the question: is VFM improving? There would be merit in piloting this approach with the other partners in KNOWFOR as part of the wider initiative to improve monitoring and evaluation.

Lessons learned

There are risks in attempting to draw lessons from a small and non-representative sample of very different activities. Each may be a special case. That said, several factors appear to be associated with better or worse outcomes. In view of the small and diverse sample, only those factors that apply to two or more activities are mentioned here. Other lessons are contained in the individual activity reports in Section 3.

Several conditions appear to lead to better outcomes:

- The use of highly credible external partners that have strong networks that extend to practitioners. This helps to elevate the national and internal World Bank interest in the results of the work, and provides a clear uptake pathway for results into other external arenas in which the partner operates. Credible and influential partners enable the work to be continued beyond the end of the activity, and increases the chances of uptake, influence and sustainability.
- The use of high quality consultants with experience of working within the World Bank and other involved national/international institutions. Even when highly competent, consultants without knowledge and positioning within the World Bank were less able to transmit learning to World Bank staff and beyond.

²⁴ ‘To remain relevant, the Bank must improve the quality of its services; learning and knowledge offer an important competitive edge’. Learning and Results in World Bank Operations: How the Bank Learns. Overview. IEG, World Bank Group. July 2014

- An internal champion and manager in post from activity initiation to uptake and with the connections to operational activities and networks within the Bank to assure uptake of results.
- In the case of national activities, clear demand/ownership by the government and country management unit (CMU), and a definite operational use for the outputs.
- Clear impact pathways identified and developed at the outset, including identification of boundary partners and processes to ensure they are engaged from the beginning of the activity, and a clear identification of target audiences beyond the immediate World Bank actors.
- Timely interim and final reports, and the effective use of workshops at World Bank, national, regional, international level.

The conditions associated with a reduction in performance were the opposite of these. Those activities that lacked one or more of the positive conditions listed above, even the more successful ones, suffered from diminished uptake, outcomes or sustainability. The lack of strong external partners, lower quality consultants, changes in the TTL responsible, unclear target audiences, and late or non-existent reports were all associated with reduced performance in several of the activities evaluated.

There may also be lessons from this evaluation about the type and scope of future external evaluations. Limiting evaluations to a small number of select activities is an unusual approach. In this case it limited the evaluators to what could or could not be said on the basis of eight, not necessarily representative, activities. A better approach, from either a lesson learning or an accountability perspective, might be to commission an independent evaluation of a theme as a whole or, less frequently, of PROFOR as a whole. This could and should still examine specific activities but it would also evaluate the portfolio in its entirety. A properly independent evaluation would also independently select the activities to be evaluated.

Recommendations

It is important to point out that all the activities evaluated pre-date the new design and reporting measures introduced under the revised M&E system from 2014 onwards. Reviewing these was not part of the terms of reference, and it is not possible to say whether more recent PROFOR activities are more likely to display the positive conditions listed above. Some of the recommendations that follow may already have been superseded by changes already in place or planned.

The evaluators make the following recommendations. PROFOR should:

- review the new management and M&E procedures for PROFOR-supported activities, including document storage and retrieval, in the light of this report;
- ensure that a short Briefing Note is produced, either as part of the activity or by the secretariat, for all the activities it supports within six months of project completion. There would be particular value in a Briefing Note for the Forests, Fragility and Conflict activity.
- consider setting up a designated follow-up fund which could be used to complete or expand reporting and communication activities at the end of the activity.
- ensure that special management attention is given to activities where the TTL is changing or where the outputs are more than six months overdue.
- Develop and pilot the VFM scorecard in coordination with its KNOWFOR partners.

- Consider a different approach to the external evaluation of PROFOR activities. Periodic in-depth evaluations of the complete portfolio of activities (or thematic portfolios) may be more useful than this type of selective activity evaluation.

ANNEX A: Terms of Reference

A. BACKGROUND AND OBJECTIVES

The Program on Forests (PROFOR) is a multi-donor collaborative partnership that aims to strengthen forests' contribution to poverty reduction, sustainable economic development, and the protection of global and local environmental values (www.profor.info). The purpose of PROFOR is to contribute to building the capacity of institutions and stakeholders in forest policy processes to address these challenges more effectively. PROFOR supports global, donors, the private sector, regional and non-governmental organizations, and civil society to:

- ☑ provide analysis on key forest-related topics;
- ☑ mainstream sustainable forest management and forest governance;
- ☑ test innovative instruments and approaches;
- ☑ develop and disseminate knowledge products; and
- ☑ build and strengthen networks, partnerships, processes, and stakeholder dialogue.

PROFOR integrates its findings into World Bank Group-supported strategies, initiatives, investments, analytic work, and technical assistance for forest sector development, and also through global programs and partnerships such as the Forest Carbon Partnership Facility and the Climate Investment Funds. PROFOR support is intended to strengthen Bank collaboration with other development partners, such as members of the Collaborative Partnership on Forests, the European Union's programs on forest law enforcement, governance and trade (EU FLEGT), and a variety of initiatives related to REDD+. To bolster understanding of the outcomes and potential impacts of PROFOR's work, PROFOR is seeking a highly qualified consultant to 1) carry out an evaluation of select PROFOR activities relating to the theme of cross-sectoral policy coordination and 2) identify appropriate metrics and means to assess the results of PROFOR activities more generally. PROFOR activities relating to the cross-sectoral theme have addressed opportunities and threats to forests from other sectors, sought to increase policy coherence, and developed tools to evaluate and report on impacts of other sectoral developments.

The objectives of this evaluation are threefold:

- ☑ To assess the outcomes and potential impacts of select PROFOR activities relating to cross-sectoral policy coordination;
- ☑ To distill lessons about key factors that led to success (or failure) of the select activities to inform future engagement; and
- ☑ To identify practical metrics and means to assess the results of PROFOR work moving forward.

To reach these objectives the evaluation will assess a subset of PROFOR activities – a few of which will be examined in depth to develop and provide guidance on value for money measures for PROFOR. It is expected that this work will begin by late-September 2014 and be completed by mid-March 2015. Deliverables will include an inception report describing how the task will be carried out, a draft evaluation, the final evaluation and recommendations, and a PowerPoint presentation of evaluation findings and recommendations. Results will be used by the PROFOR Advisory Board and Secretariat to inform future programming.

B. SCOPE OF WORK

The consultant will carry out two related tasks: 1) an independent evaluation of evaluation of select PROFOR activities and 2) identification of practical metrics and means for PROFOR to assess the outcomes and impacts of its work. The evaluation will examine in detail the results of selected closed activities from PROFOR's portfolio relating to the theme of cross-sectoral policy coordination. The selection of activities to be reviewed will be agreed with the PROFOR Secretariat once the consultancy begins, but may include such activities as:

Economic Growth and Forests Strategy

- ☒ The Role of Forests in Low Carbon Growth Strategies (<http://www.profor.info/node/2058>)
- ☒ Economic Growth and Drivers of Deforestation in the Congo Basin (<http://profor.info/node/1887>)
- ☒ Forestry in Sub-Saharan Africa: Challenges and Opportunities (<http://www.profor.info/node/1892>)
- ☒ Nepal Forest Sector Strategy (<http://www.profor.info/node/1902>)
- ☒ West Africa Forests Strategy (<http://www.profor.info/node/1905>)

Forests, food, and fuel

- ☒ Biochar Systems for Smallholders in Developing Countries (www.profor.info/node/2027)
- ☒ Forest Indonesia Conference: Alternatives futures to meet demands for food, fiber, fuel and REDD+ (<http://www.profor.info/events/forests-indonesia-alternative-futures-meetdemands-food-fibre-fuel-and-redd>)
- ☒ Impacts of Climate Change on Rural Landscapes in Brazil (www.profor.info/node/2061)
- ☒ Implications of Changes in Agro-food and Fuel Prices on Rural Livelihoods and Forests in Syria (<http://www.profor.info/node/1900>)

Forest restoration

- ☒ Assessment of Forest Landscape Restoration Potential in Ghana (www.profor.info/node/2003)
- ☒ Landscapes of Opportunity (<http://www.profor.info/node/1889>)
- ☒ Chile - Forests, Trees and Conservation in Degraded Lands (<http://www.profor.info/node/2083>)

The evaluation will assess what the baseline knowledge or situation was relating to the aspect of cross-sectoral collaboration addressed within specific PROFOR activities or clusters of activities, what gap the PROFOR activities aimed to fill, how PROFOR's work has filled that gap, and the outcomes and, where a reasonable case can be made, impacts of the various activities.

To complete the evaluation will require:

1. Drafting an inception report describing how the task will be carried out, what information will be required, the analytic framework and tools that will be used, and an outline of the final report.

2. Reviewing the findings from previous evaluations and reviews of PROFOR and, where relevant, incorporating insights into the current evaluation.
3. Determining the relevant outcomes and impacts to assess for each activity or cluster of activities.
4. Conducting an extensive desk-review of relevant documentation.
5. Developing a structured interview framework to carrying out consultations, in person or over the phone, with:
 - a. The team that implemented the work and members of the PROFOR Secretariat, and
 - b. The national and international clients and intended audience/beneficiaries for each activity.
6. Testing key observations on relevance, appropriateness and impact of the activity among key stakeholders, including those in developing countries, by:
 - a. Developing and administering an electronic survey of relevant PROFOR clients and audiences and, potentially,
 - b. Conducting field visits.
7. Preparing a draft version of the evaluation report.
8. Revising and finalizing the evaluation report based on feedback from the PROFOR Secretariat and/or Advisory Board.
9. Presenting findings to the PROFOR Secretariat and, as possible, the PROFOR Board.

The evaluation will require at least some time spent in person with the PROFOR Secretariat and task team leaders based in Washington, DC.

The following list of key evaluation questions is intended to guide the evaluation, though other questions and topics may be considered:

- ☐ To what extent and how well did the select PROFOR activities equip key forest-related practitioners and policy makers with relevant knowledge, conceptual frameworks, and tools?
- ☐ What changes in policy and practice related to forests and trees occurred as a result of PROFOR activities? What were the most important changes? How did PROFOR products, processes, and resources contribute?
- ☐ What are the key factors that led to the success (or failure) of the activities and what are the major lessons for future engagement by PROFOR around the theme of cross-sectoral collaboration?
- ☐ Are results achieved by select activities sustainable?
- ☐ What are practical metrics and means, including value for money indicators that PROFOR might use to assess its effectiveness moving forward?

The evaluation may use value for money metrics to assess at least some activities, but the main evaluation approach will likely be a more usual one involving analysis of the timing of the activity and change it may have affected, the logic connecting the activity to subsequent change, expert judgment about the contribution of the activity, and consideration of alternative explanations for the change.

The second task—identification of practical metrics and means to assess PROFOR’s work moving forward – will emerge largely from the evaluation and related activities described above. However, it may require additional discussion with members of the PROFOR Secretariat and analysis of additional materials including previous PROFOR Board reports and select projects addressing PROFOR’s other thematic areas (i.e. livelihoods, forest governance, and financing sustainable forest management). PROFOR is especially interested in potential value for money metrics (e.g. relating the value of World Bank operations influenced by PROFOR investments, etc.) that it might incorporate into its monitoring and evaluation framework. Recommendations for such metrics and means of tracking them should be included as part of the final report for this consultancy.

C. DELIVERABLES, RESOURCES, AND WORKING ARRANGEMENTS

Deliverables and timing

1. Inception report describing how the two tasks will be carried out (within **10 days** of the start of the assignment)
2. Draft evaluation, including report on value for money and other metrics (**January 30, 2015**)
3. PowerPoint presentation summarizing the key findings and recommendations of the evaluation (**February 20, 2015**).
4. Presentation to PROFOR Board (**March 10, 2015**)
5. Final evaluation and recommendations (**April 17, 2015**)

The expected duration of this assignment is no more than 100 working days from **Sept 25 – April 17, 2015**.

The PROFOR Secretariat will provide access to activity documentation, contact lists, and other relevant information. The PROFOR Secretariat will also help introduce the consultant(s) to relevant contacts and provide comments on inception report within 5 days of its receipt and the draft final report within 14 days of its completion.

Annex B: Evaluation Framework

	PRIMARY QUESTION	METHOD/DATA SOURCES
1. Identification, design and appraisal		
1.1	How was the activity identified and who by?	Interview: PROFOR staff and TTL Project documentation
1.2	How was the activity designed and who by?	Interview: TTL Project documentation
1.3	How was the activity appraised and who by?	Interview: PROFOR
1.4	What was the baseline knowledge or situation relating to the activity?	Interview: TTL Literature search
1.5	What gap did the PROFOR activity aim to fill?	Interview: PROFOR staff and TTL
1.6	Were the objectives clear to, and agreed by, all the stakeholders?	Interview: TTL
1.7	Were the target audience and/or beneficiaries of the activity clearly defined at the outset and how were they involved in the design and implementation?	Interview: TTL Interview: those involved in implementing activities Interview: target audience
1.8	Did the activity meet all the Criteria for PROFOR Engagement as outlined in the Guidelines?	Interview: PROFOR staff and TTL
2. Implementation		
2.1	To what extent was the activity implemented as planned?	Interview: TTL Project documentation
2.2	What problems were encountered and how were these resolved?	Interview: TTL and those involved in implementing activities Project documentation
3. Outputs		
3.1	What did the activity deliver in terms of new knowledge, conceptual frameworks and tools?	Interview: TTL and those involved in implementing activities Interview: PROFOR staff
3.2	What was the quality of these outputs?	Evaluation team assessment of outputs Interview: with users of outputs
3.3	How were the outputs reviewed and if necessary revised?	Interview: TTL
4. Outcomes		
4.1	What is known about the <u>use</u> made of the outputs (user by type, numbers, etc.)?	PROFOR website data?

		Citation analysis? Interview: with users of outputs Interview: TTL Interview: with those involved in implementing activities
4.2	What changes in the <u>capacity</u> of institutions and stakeholders has the activity contributed to?	Interview: with users of outputs Interview: TTL Interview: with those involved in implementing activities
4.3	How, and how significantly, did the PROFOR products/processes/resources contribute to these changes in capacity by equipping key forest-related practitioners and policy makers with relevant knowledge, conceptual frameworks and tools?	Interview: with users of products etc Interview: TTL
4.4	How, and how significantly, did other (non-PROFOR) products/processes/ resources contribute to these changes in capacity?	Interview: TTL Interview: users of products
4.5	What changes in <u>policy or policy coherence</u> has the activity contributed to?	Interview: TTL Interview: users of products
4.6	How, and how significantly, did the PROFOR products/processes/resources contribute to these policy changes?	Interview: TTL Interview: users of products
4.7	How, and how significantly, did other (non-PROFOR) products/processes/ resources contributed to these policy changes?	Interview: TTL Interview: users of products
4.8	What changes in <u>practice</u> has the activity contributed to?	Interview: TTL Interview: users of products
4.9	How, and how significantly, did the PROFOR products/processes/resources contribute to these changes in practice?	Interview: TTL Interview: users of products
4.10	How, and how significantly, did other (non-PROFOR) products/processes/ resources contribute to these changes in practice?	Interview: TTL Interview: users of products
5. Impacts and sustainability		
5.1	Is there evidence that the activity strengthened forests' contribution to poverty reduction, sustainable economic development, and /or the protection of global and local environmental values?	Interview: TTL to identify key informants to provide evidence of changes in poverty, sustainable economic development, and/or environmental values arising from the changes in capacity/policy/practice.
5.2	To what extent are the outputs, outcomes or impacts sustainable or of long-term value?	Interview: PROFOR staff Interview: TTL Judgement of evaluation team based on assessment
6. Lessons		
6.1	What were the main strengths/successes of the activity?	Interviews with informants at all stages of the results chain

6.2	What were the main weaknesses/failures of the activity?	Interviews with informants at all stages of the results chain
6.3	What were the key factors that contributed to the successes or failures of the activity? (including PROFOR management and role of World Bank)	Interviews with informants at all stages of the results chain

Annex C: People consulted

Person contacted	In person, phone or email interview
Markku Aho	Former FINNIDA representative on PROFOR Board
Emily Harwell	Consultant
Doug Farah	Consultant
Nik Myint	World Bank
Faith Doherty	EIA
David Young	Consultant
Megan MacInnes	Global Witness
Jodi Vittori	Global Witness
Saskia Ozinga	FERN
Clare Brogan	GRM/ <i>theIDLgroup</i>
Erick Fernandes	World Bank
Peter Jipp	World Bank
Jeff Campbell	FAO
John Hudson	Chair of CIFOR Board
Simon Rietbergen	Former World Bank
Erik Bloom	World Bank
Garo Batmanian	World Bank
Gaia Allison	DFID
Peter Dewees	Former PROFOR
Johannes Lehmann	University of Cornell
Dana Rysankova	World Bank
Klas Sander	World Bank
Sebastian Scholz	World Bank
Kelpie Wilson	Consultant
Carole Megevand	World Bank
Martin Tadoum	COMIFAC
Benoit Bosquet	World Bank
Crispino Lobo	Watershed Organisation Trust
Jim Smyle	Consultant
Grant Milne	World Bank
Deep Joshi	Chair of Govt of India Planning Commission Working Group on Watershed Development for the 12 th Plan
Sandeep Dave	Ministry of Rural Development
Aline Mosnier	IIASA
Michael Jenkins	Forest Trends
Valerie Hickey	World Bank
Flore de Préneuf	World Bank
Rob Griffen	World Bank
Debbie Read	IBI
Thayer Tomlinson	IBI
Diji Chandrasekharan Behr	PROFOR
Nalin Kishor	PROFOR
Daniel Miller	PROFOR
Laura Ivers	PROFOR

Annex D: Google search results

Different web-based searches were undertaken to assess the accessibility of the different PROFOR products. These included a general Google search and a Google book search for published outputs. This is the first level of searching that most people we asked during the evaluation process use when they are looking for information to inform their work. We also did a citations search to assess the degree to which PROFOR supported products were being taken up more widely by academics and cited in their work. Finally a search of the PROFOR website was undertaken to see whether the activities and their products were easy to find on the website and whether the website had been updated to reflect the status of the activity under review.

Activity knowledge product output	Authors	Date of publication	Publisher	Key word search	Google Books	Google search
Biochar systems for smallholders in developing countries	Sebastian Scholz, Thomas Sembres, Kelli Roberts, Thea Whitman, Kelpie Wilson, Johannes Lehmann	2014 Work completed in 2011	World Bank	Biochar smallholders	p.1: 1 st two references	p.1: 9 out of 10 references are to the PROFOR study
Watershed development in India: an approach evolving through experience	Jim Smyle Crispino Lobo Grant Milne Melissa Williams	March 2014	World Bank Agricultural and Environmental Services Discussion Paper 04	Watershed development India Watershed development India experience Watershed development India approach experience Watershed development India World Bank Full title: Watershed development in India: an approach evolving through experience	No reference on p.1 No reference on p.1 No reference on p.1 No reference on p.1 No reference on p.1	No reference on p.1 p.1: 5 th reference

<p>Forests, fragility and conflict: overview and case studies</p> <p>Note only when word fragility is included does main study get cited on first page</p>	<p>Emily Harwell Douglas Farah Art Blundell</p>	<p>June 2011</p>	<p>PROFOR</p>	<p>Forests fragile states</p> <p>Forests fragile states conflict</p> <p>Forests fragility</p> <p>Forests fragility conflict</p>	<p>No reference p.1 (does reference Deforestation trends in the Congo Basin)</p> <p>No reference p.1</p> <p>p.1: 1st reference</p> <p>p.1: 1st reference</p>	<p>p.1: 1st reference</p>
<p>Deforestation trends in the Congo Basin: reconciling economic growth and forest protection</p>	<p>Carole Megevand with Aline Mosnier, Joel Hourticq, Klas Sanders, Nina Doetinchem and Charlotte Streck</p>	<p>2013</p>	<p>World Bank</p>	<p>Deforestation trends</p> <p>Deforestation trends Congo Basin</p> <p>Economic growth forests Congo Basin</p>	<p>p.1: 1st reference</p> <p>p.1: 1st reference</p> <p>p.1: 1st reference</p>	<p>p.1: 1st reference</p> <p>p.1: 1st reference</p>

Annex E:Dissemination assessment: Activity citation search

Activity knowledge product output	Authors	Date of publication	Publisher	Keyword search	Google scholar search	Citations	Comments
Biochar systems for smallholders in developing countries	Sebastian Scholz, Thomas Sembres, Kelli Roberts, Thea Whitman, Kelpie Wilson, Johannes Lehmann	2014	World Bank	Biochar smallholder	p.1 reference 4	One citation	PROFOR is not mentioned on the front cover or under the attribution Mentioned as funder in Acknowledgements
				Biochar developing countries	p.9 reference 10	One citation	
Watershed development in India: an approach evolving through experience	Jim Smyle Crispino Lobo Grant Milne Melissa Williams	March 2014	World Bank Agricultural and Environmental Services Discussion Paper 04				PROFOR is not mentioned on the front cover or under the attribution Mentioned as funder in Acknowledgements
				Watershed development in India an approach evolving World Bank	Searched to p.20 no reference		Can only be found using the exact title
				Watershed development in India experience	Searched to p.20 no reference		
				Watershed development in India an approach	Searched to p.20 no reference		
				Watershed development in India	Searched to p.24 and no reference		

				Indian watersheds	Searched to p.20 and no reference		
				Lessons from Indian watersheds	Searched to p.16 and no reference		
				Watershed development in India	Searched to p.17 and no reference		
				Author search: Milne Smyle Lobo Milne + India Smyle + India Lobo + India	Searched to p.16 no reference Searched to p.16 ?no reference Reference p.3 Reference p.1 No reference Reference p.2	No citations	
Forests, fragility and conflict: overview and case studies	Emily Harwell Douglas Farah Art Blundell	June 2011	PROFOR				PROFOR published report – so clear attribution
				Forests and fragile states	p.1 second reference	7 citations	Emily Harwell authored background study Forests in Fragile and Conflict-affected States 2010 No reference to final study
				Forests conflict	p.4 6 th reference	7 citations	Emily Harwell authored background study No reference to final study
				Forests fragility	p.1 second reference	3 citations	PROFOR final published study
				Forests fragile states conflict	p.1 second reference	7 citations	Emily Harwell authored study No reference to final study
				Forests fragility conflict	p.1 first reference	7 citations	Emily Harwell study
p.1 6 th reference	3 citations	Emily Harwell et al PROFOR final published study					
Deforestation trends in the Congo Basin:	Carole Megevand with Aline	2013	World Bank				PROFOR is not mentioned on the front cover or under the attribution.

reconciling economic growth and forest protection	Mosnier, Joel Hourticq, Klas Sanders, Nina Doetinchem and Charlotte Streck					Mentioned as funder in Acknowledgements	
				Deforestation Congo Basin	p.7 9 th reference	9 citations	Final study
					p.4 4 th reference	6 citations	Modelling impact of development trajectories and a global agreement on reducing emissions from deforestation on Congo Basin Forests by 2030 A Mosnier, P Havlik, M Obsersteiner 2014 Environmental Resource Economics 57: 505-525 journal article
				Economic growth, forests, Congo Basin	p.16 6 th reference	6 citations	As above
					p.21 1 st reference	9 citations	Final study
				Drivers of deforestation Congo Basin	p.5 10 th reference	9 citations	Final study
					p.3 1 st reference	6 citations	Modelling impact of development trajectories and a global agreement on reducing emissions from deforestation on Congo Basin Forests by 2030 A Mosnier, P Havlik, M Obsersteiner 2014 Environmental Resource Economics 57: 505-525 journal article

Annex F: PROFOR website trawl for presence and ease of finding products

Activity	Key word search on PROFOR website	Knowledge	News and events	Field notes	Availability of final product
Biochar	Biochar <i>Led to relevant webpages</i>	Short report on biochar, approach and results Video interview Indicates results will be made available	Workshop with presentations No follow-up report	Biochar systems in Senegal – a blog by the TTL for the biochar study, discussing biochar and indicating the study will be published in 2014	
Links to final product	No link to final product from website	No links		A link to the PROFOR webpage to go to the study but takes the reader back to the knowledge page	No final product available
Date of last update		12.5.2011	11.5.2011		
Low carbon growth	Low carbon growth <i>Led to relevant webpage</i>	Link to ESMAP Low Carbon Development Country Studies			
Links to final product					No final product available
Date of last update		03.08.2011			
Turkey watersheds	Turkey <i>Led to relevant webpage</i>	ISRIC presentation on Land Degradation and Risk Mapping in Turkey			
Links to final product					No final product available
Date of last update		06.29.2010			
Drivers of Deforestation	Drivers of deforestation and Congo Basin Economic growth, drivers of deforestation, Congo Basin	Led to listing of various events and knowledge products but not the	Listing of regional conference on drivers of deforestation	Describes the final study but not link to it. The notes are referring to the decline of bonobo	Available but have to work through other pages to access it, not easy to find directly.

	<p><i>Did not lead directly to relevant page</i></p> <p>Deforestation trends Economic growth</p> <p><i>Led to recommendations page from main study</i></p> <p><i>Use of full study title also did not lead directly to relevant knowledge page</i></p>	<p>Deforestation Trends study knowledge page</p> <p>From recommendations page could access the knowledge page for Economic Growth and Drivers of Deforestation – links to main study and to main background studies</p>	<p>(related content listed briefing papers in French from background studies)</p>	<p>chimpanzees and not directly related to the study itself.</p>	
Links to final product		<p>Difficult to find through keyword search does not lead directly to study</p>			
Date of last update		<p>28.5.2013</p>			
Forests, fragility and conflict	<p>Forests, fragility</p>	<p>Short report on the topic of the study Video interview with lead author</p>		<p>Short note on discussion of work at World Bank with brief interviews with Emily Harwell and Art Blundell</p>	
Links to final product and other useful products		<p>One link to WDR does not work Other link does</p>		<p>Background papers not available from link</p>	<p>Link available on Knowledge page</p>
Date of last update				<p>Reported from 25.10.2010</p>	
Brazil charcoal production	<p>Brazil charcoal <i>Led to relevant webpage</i></p>	<p>Presentation in Portuguese describing the study; links to Minas Gerais Plantar project and the Development Policy Loan for Minas Gerais</p>			
Links to final product					<p>No final product published</p>

Date of last update		04.24.2013			
Indian Watersheds (1st grant learning lessons)	Indian watersheds <i>no result</i> Learning India watershed <i>No result</i> Watershed development India <i>Led to correct links</i>	Indicates preliminary findings shared at Delhi workshop and lessons used in design of follow-up Karnataka watershed project	No news and events	No field notes	
Links to final product and other useful products		Indicates final report will be shared, but no link and no final report			No draft or final product available
Date of last update		18.1.2011			
Indian Watersheds Second grant		Indicates activity is on-going, does indicate link to previous learning activity	No news and events	No field notes	
Links to final product and other useful products		Link to draft report only takes the reader back to the Knowledge page for the first grant and not to a report			No final product available
Date of last update		10.1.2013			
Brazil climate change	Brazil climate change <i>Led to correct webpage</i>	Summary of results and findings			
Links to final product		Link to final report in Portuguese			Available in Portuguese
Date of last update		06.03.2014			

Annex G: Esurvey questionnaire and results

'Évaluation des activités PROFO' Survey Results | Polldaddy.com

Évaluation des activités PROFOR sélectionné

Survey Results

Question	Answers	Skips
01 Quel est le terme qui décrit le mieux votre activité professionnelle ?	4 100%	0 0%

	NEW COLUMN
Chercheur	0
Etudiant	0
Membre de la société civile	0
Elu local ou national	0
Employé de ministère	1
Employé de bailleur/organisation internationale	2
Consultant	1

Exploitant forestier	0
Exploitant minier	0

10/3/2015

'Évaluation des activités PROFO' Survey Results | Polldaddy.com

Question

02

Quel est votre champ principal d'intervention ?

Answers

4

100%

Skips

0

0%

	Answers	Skips
Plaidoyer changement climatique		0
Recherche liens déforestation climat		1
Recherche adaptation /mitigation changement climatique ?		1
Développement des politiques climat		0
Programmes REDD+		2
Industrie forestière		1
Industrie agro alimentaire		0
Industrie minière ?		0
Autre ?		0

Question

03

Avez-vous participé à l'étude ?

Answers

4

100%

Skips

0

0%

NEW COLUMN

Oui

3

10/3/2015

'Évaluation des activités PROFO' Survey Results | Polldaddy.com

Non

1

Question

04

Si oui en quelle capacité ?

Answers

3

75%

Skips

1

25%

Chercheur

0

Informateur

2

Bailleur

0

Membre de la société civile

1

Question

05

Pouvez-vous décrire en quelques lignes de quelle manière cette étude vous est-elle utile dans votre activité professionnelle?

Answers

3

75%

Skips

1

25%



La poursuite de l'évolution de la gestion durable des forêts et dans les concessions d'exploitations forestières. Il faut donner de la valeur au secteur informel du bois c'est à dire formaliser ce secteur pour une assurance de l'approvisionnement durable de bois d'œuvre sur le marché local, national et pourquoi pas le marché international afin

Tuesday, Mar 3rd
10:42PM

119,867,082 de promouvoir le système de certification forestière et soutenir le processus et les échanges commerciaux (FLEGT) soutenu par l'Union Européen.

119,436,734 cette étude de la dynamiques de la déforestation dans le bassin du Congo nous a aidé en ce qui suit:

Thursday, Feb 26th

10/3/2015

'Évaluation des activités PROFO' Survey Results | Polldaddy.com



Fournir aux décideurs des outils facilitant la prise de décisions informées sur la gestion forestière, faire participer les parties prenantes dans le développement des politiques forestières.

10:39PM



119,340,499

L'étude a permis de confirmer a la fois nos hypotheses programmatiques sur les questions de la deforestation liee aux industries extractives dans le Bassin du Congo, ainsi que les inadequations des policies en matiere d'ammenagements des paysages forestiers (Habitats) au niveau aussi bien regional que des pays de la sous region.

Wednesday, Feb 25th

10:41PM

Question Quelles sont à votre avis les principales leçons de l'étude ? Par exemple, que savez-vous maintenant que vous ne saviez pas avant cette étude? En quoi les leçons

06

sont-elles pertinentes pour votre travail ?

Answers

3

75%

Skips

1

25%

Maintenant , je sais que les institutions peuvent être renforcer.

En tant qu'administratif, nous sommes confronter à beaucoup de problèmes sur le terrain, en terme de planification, de suivi et évaluation et contrôle des ressources forestières.

Quand les administratifs sont bien équipés, bien formés et surtout bien payés pour éviter la corruption, on pourra lutter

119,867,082

contre l'exploitation illégale de bois d'œuvre à tout les niveaux.

Car les administratifs doivent être également formés sur le système d'information géographique.(SIG)

Tuesday, Mar 3rd

10:42PM



les facteurs actifs de la déforestation dans le bassin du Congo.

Thursday, Feb 26th


10:39PM

 119,436,734

l'etude donne une vue globale sur les drivers dans le bassin du Congo.Neanmoins, personnellement j'avais souleve le fait que l'etude se concentre davantage sur les parametres de corissances economiques juste au niveau du bassin du Congo ,alors que les zones forestieres a L'Est de la RDC; sont plus en relation significative avec les forces economiques de l'Afrique de l'Est (Zone EAC).

Wednesday, Feb 25th

10:41PM

 119,340,499

10/3/2015

'Évaluation des activités PROFO' Survey Results | Polldaddy.com

Question

07

Dans quelles mesures les résultats de l'étude étaient-ils particulièrement utiles dans les discussions sur le changement climatique et les politiques REDD+ ?

Answers

3

75%

Skips

1

25%

Les résultats étaient utiles dans les différents facteurs de la déforestation. Le pays améliore la séquestration du carbone à travers la forêt. Jusque là beaucoup de gens ne maîtrisent pas les éléments sur la REDD+, mais les négociations sur les forêts et le changement climatique sont beaucoup plus dans le bassin du Congo.

119,867,082



Tuesday, Mar 3rd

10:42PM

les interventions basées sur les résultats mesurés, documentés et vérifiés

119,436,734



Thursday, Feb 26th

10:39PM

Cette étude a permis de ressortir la problématique d'utilisation des sols dans le Bassin du Congo, comme étant un facteur clé afin de concilier la croissance économique et les objectifs de changement climatique. Ceci entre aussi en relation avec la phase d'investissement REDD+, notamment en RDC et les autres pays de la sous-région, où les scénarios de référence devront être évalués de manière sectorielle, ainsi que l'articulation des scénarios d'utilisations des terres (Conservation, exploitation, puits de séquestration carbone, zone de reforestation, déploiement agricoles, urbanisation et autres aménagements industriels comme les mines).

119,340,499



Wednesday, Feb 25th

10:41PM

Question

08

Avez-vous utilisé les résultats de l'étude comme levier pour obtenir des financements pour mener des activités connexes?

Answers

3

75%

Skips

1

25%



Oui, nous avons tenté avec ma Direction en charge de la forêt auprès de la GIZ pour chercher l'appui mais sans suite:

- élaborer les statistiques forestières sur les unités de transformations des bois;

-établir les statistiques forestières sur les produits forestiers non ligneux;

119,867,082

- vulgariser les textes légaux sur les forêts des communautés locales

Tuesday, Mar 3rd

10:42PM

10/3/2015

'Évaluation des activités PROFO' Survey Results | Polldaddy.com



je ne suis plus là où je travaillais, mais actuellement nous avons des financements grâce au fond REDD.

Thursday, Feb 26th

10:39PM

119,436,734



Non, nous avons par contre estime qu'il pas eu assez d'appropriation politique et institutionnel de l'etude au niveau notamment , des Etats et des instances sous regionales (COMIFAC, CEEAC) qui pourraient generer un momentum favorable au developpement des propositions a une echelle aussi vaste que la region. Divers initiatives en matiere de

Wednesday, Feb 25th

10:41PM

119,340,499 changement climatique et de croissance economiques sont prises au seins des institutions internationales , notamment la BAD avec la croissance verte (Departement ONEC3/OIVP) qui se met en place depuis deux ans.

Question

09

Est-ce que les résultats de l'étude vous ont donné de nouvelles idées de recherche pour développer des concepts de projets plus pratiques sur le terrain, pour alimenter un plaidoyer ou organiser un débat dans votre pays ? si oui pouvez-vous expliquer brièvement ?

Answers

3

75%

Skips

1

25%

- On peut organiser un débat ou alimenter un plaidoyer sur l'exploitation illicite de bois d'œuvre;

Tuesday, Mar 3rd

- On peut également penser à intégrer le genre dans le secteur forestier;

10:42PM

119,867,082 - Penser au consentement libre intégré au préalable.



oui, En ce qui concerne les clauses sociales entre les exploitants et les communautés locales

Thursday, Feb 26th
10:39PM

119,436,734



Oui a un certain niveau , nous avons essaye de ramener la reflexion au niveau de la COMIFAC et de la CEEAC ,sur les acquis de cette etude ; ainsi que de la necessite a la completer par une phase de reflexion operationelle qui amenerait a des principes directeurs en matiere de croissance economique, responsabilite , durabilite ,et changement climatique dans le bassin du Congo. Ceci constituerait la phase idoine pour capitaliser l'investissement fait avec cette etude. Il sied

119,340,499 aussi de signaler que l'etude , outre le caractere modelistique Congo Biom, n'as pas ressorti pleinement la dimension de la Gouvernance /policies comme etant un de facteur cle devant permettre l'aide a la decision dans le cadre de

Wednesday, Feb 25th
10:41PM

l'equilibre changement climatique , croissance economique et deforestation .

10/3/2015

'Évaluation des activités PROFO' Survey Results | Poll daddy.com

Question

10

Savez-vous si les recommandations de l'étude ont mené à des actions concrètes dans votre contexte national ? Si oui pouvez-vous expliquer brièvement la nature des actions (par exemple : discussions au parlement, débat dans la presse, émission radio?)

Answers


3

75%

Skips

1


25%

 pour avoir de la statistique fiables, il faut respecter la filière bois c'est à dire de la forêt jusqu'à la commercialisation.

Tuesday, Mar 3rd
10:42PM

Voilà plus ou moins ma petite contribution
de la part de Madame Martine KANKOLONGO

119,867,082

 les recommandations ont permis de suivre les permis d'exploitation artisanale délivré par le ministère de l'Environnement, qui a fait un débat à tout le niveau sur la gestion des forets En Rdc

Thursday, Feb 26th
10:39PM

119,436,734

Non , pas informe a ce jour.

.....

 Maxime Nzita Nganga

Wednesday, Feb 25th
10:41PM

119,340,499

WWF Central Africa Regional Coordinator

Business & Extractive Industries