



Technical Report

Lessons Learned from Design of the Social Co-benefits Monitoring System for Seima Protection Forest REDD+ Demonstration Project

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Disclaimer

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Acronyms

BNS	Basic Necessities Survey
CCB	Climate, Community and Biodiversity
GIS	Geographic Information System
HCV	High Conservation Value
HHS	Household Survey
REDD+	Reducing Emissions from Deforestation and Forest Degradation, and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in Developing Countries
UNFCCC	United Nations Framework Convention on Climate Change

Introduction

To effectively tackle the drivers of deforestation and degradation, it has been proposed that performance-related payments should be provided to developing countries through REDD+. These payments will be channelled by national governments into a range of national-level and local level actions. Decisions under the United Nations Framework Convention on Climate Change (UNFCCC) in 2011 established a core set of social and environmental safeguards that each recipient country should apply alongside these actions¹, and also required the establishment of a system to provide information on how the safeguards are being addressed and respected. As yet there is no detailed guidance from the UNFCCC on the design of this information system.

This policy brief contributes to the development of a national information system for social co-benefits within Cambodia's national REDD+ readiness system, using selected findings from recent site-level work in the Seima Protection Forest REDD Demonstration Project². The monitoring system being piloted in Seima aims to comply with the requirements of the Climate, Community and Biodiversity (CCB) Standard for voluntary market projects and measures net changes in well-being for all social groups by following the CCB guidance manual for social assessments³. This may not match exactly the system that will be required under the UNFCCC frameworks, but is likely to contain many of the elements that will be required and so is an informative case study.

Key findings

Findings are presented under the following broad headings:

- A. Methods for the attribution of impacts
- B. Geographical scope and synergies with other monitoring systems
- C. Selection of survey methods and specific indicators
- D. Disaggregation of indicators by social group
- E. Adapting the system to changing social circumstances

A Methods for the attribution of impacts

Principle 1. Attribution of outcomes to specific activities is one of the most difficult elements of system design and requires careful consideration.

Direct measures of the overall well-being of households or communities participating in REDD+ schemes are valuable but do not in themselves provide information about *why* trends in well-being occur. There are

¹ The social aspects of the safeguards include requirements to '... respect the knowledge and rights of indigenous peoples and local communities.', '... ensure the full and effective participation of relevant stakeholders and indigenous peoples.' and 'ensure that the actions are used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental services..'. [Cancun Agreements, Decision 1/CP.16 Articles 69 & 71]

² Travers, H. and Evans, T. D. (2013) *Development of a social impacts monitoring system for the Seima Core Protection Forest REDD+ Demonstration Site*. WCS Cambodia Program, Phnom Penh. The study covers an area of over 180,000 ha of forest and a population of over 13,000 people in 20 villages. Inputs from Tom Clements, Sarah Milne, Suon Seng and David Wilkie are gratefully acknowledged.

³ Richards, M. and Panfil, S.N. (2011) *Social and Biodiversity Impact Assessment (SBIA) Manual for REDD+ Projects: Part 1 – Core Guidance for Project Proponents. Version 2*. Climate, Community & Biodiversity Alliance, Forest Trends, Fauna & Flora International, and Rainforest Alliance. Washington, DC.

many other factors also driving social change in Cambodia, so attributing any positive or negative change to a REDD+ program (rather than one of these other factors) requires careful study design.

The national REDD+ program may also involve more than one activity affecting a given social group, which further increases the complexity of attributing cause. Where possible, it will be preferable to analyse separately the impacts of specific activities targeting individual areas, groups or policy issues.

For these reasons it is essential to be precise over what REDD+ activities are being assessed for impact and what impacts they are expected to have. Monitoring should focus on processes or conditions that are most likely to be affected by the project, rather than considering all trends that may affect well-being. It is also important to be clear what level of assurance is needed that the observed impacts are attributable to particular activities, as discussed under Principle 2.

Principle 2 Formal experimental approaches may be required for testing the impact of some key interventions, but conceptual models (results chains) may be a more useful general framework for national level monitoring.

The scientific 'gold-standard' for attributing impacts to causes is to use experimental or quasi-experimental methods (such as randomised control trials or matched control survey designs, ideally assessing results before and after for both control and intervention groups [so-called BACI]). These are likely to be important for testing the impacts of key interventions at sample or pilot localities. However, they are probably not applicable to the entire national program, due to the cost and complexity, the difficulty of finding control areas where REDD+ is not being applied, the difficulty of separating the effects of different actions occurring at the same location, and ethical considerations over the exclusion of control groups from possible benefits.

An alternative, less rigorous but more affordable and flexible approach to attributing impacts that still delivers a reasonable degree of confidence is to test the logic of a conceptual model (also called a 'results chain'). This model links hypothesized threats to project interventions and desired project outcomes and has the added benefit of making clear the logic behind making particular interventions. This was the approach used in the Seima pilot, following CCB guidance.

Principle 3 A set of supplementary indicators will probably be needed to support each headline indicator.

It is very hard to select single indicators of well-being that unambiguously reflect changes directly and solely attributable to project success or failure. This is implicit in the idea of a conceptual model – the interpretation of core indicators requires supplementary data on the trends of various possible causal factors.

For example if levels of observed land alienation decline in the same areas that levels of REDD+ financed land titling have increased, communities are reporting increased levels of perceived land security and no other important potential factors have been identified during consultations, it is probably reasonable to conclude that the titling work has led to an increase in land security, and hence at least one aspect of well-being. In this example the progress in land titling and perceived levels of land security are supplementary indicators that inform our understanding of the headline measure regarding land alienation.

B. Geographical scope and synergies with other monitoring systems

Principle 4 Coordinated monitoring at the forest management unit level can contribute to national level monitoring.

Independent of any REDD+ requirements, effective monitoring should be incorporated into the adaptive management framework for each major forest management unit in Cambodia because it is a part of best practice. If this is done in a coordinated way (e.g. by using common frameworks, shared core indicators and shared capacity-building) it can also generate a large part of the information required for REDD+ monitoring at the national level. This is particularly true as active forest management units are likely to be

the main areas where REDD+ investments are made. The Seima Protection Forest case study is a practical example of how this can be done.

Site-based monitoring frameworks can also potentially be used as cost-effective mechanisms to collect additional indicators that are not required locally but are required at the national level.

Principle 5 Where opportunities exist, datasets being collected for other purposes should be used, to minimise incremental costs of setting up REDD+ monitoring.

Many other social surveys take place in Cambodia and there may be opportunities to import indicators for use in REDD+ monitoring. However, it is likely that most of the indicators needed are not currently being collected, as suggested by the review of opportunities relevant to Seima. For example, the Cambodian national poverty-line monitoring system has very low sample sizes in forest-edge villages so it is very unlikely to provide a sufficiently accurate estimate specific to REDD-affected communities.

The annually updated Commune Database includes large numbers of social indicators and the demographic data component has been found to be sufficiently reliable to be useful in Seima, especially in association with the national GIS dataset of village locations and some ground-truthing. However, the quality of many of the livelihood indicators needs further review and these were not felt to be sufficiently reliable for monitoring REDD+ outcomes in Seima.

There are potential synergies between data collection for REDD+ safeguards and reporting requirements under other international conventions, such as the Convention on Biological Diversity.

C. Selection of survey methods and specific indicators

Principle 6 The most informative and cost-effective approach to monitoring is likely to use a variety of complementary survey methods.

The selection of methods is closely linked to the selection of indicators (see Principle 7). Surveys should avoid an over-reliance on quantitative household surveys (which have a number of widely-recognised constraints) and make full use of qualitative, participatory methods as well. The conceptual model approach encourages consideration of a variety of approaches appropriate for different steps in the results chain. In the Seima case study the following social survey methods were all found to be needed:

- A *rapid demographic survey* at sub-village level, to be conducted every 2-3 years, which supplements basic information in the Commune Database.
- *Activity monitoring* to ensure that the main interventions have been conducted as planned, through the annual work-planning cycle of Seima Protection Forest.
- Direct monitoring by implementing partners of the *immediate results of selected development interventions* (e.g. adult education, agricultural extension or ecotourism).
- *Periodic consultation workshops* for qualitative measures including, notably, detection of unexpected negative impacts. Improved stakeholder communication is a valuable by-product of this method. These consultation workshops are also being incorporated into the annual work-planning cycle of Seima Protection Forest.
- A statistically robust *household-level survey* (HHS) of quantitative measures across all 20 target villages will be conducted periodically (probably every 2-3 years)⁴.

In addition *GIS analyses* will be made of pre-existing data (e.g. remote sensing analyses of forest cover trends, land titles issued and large scale threats such as agricultural concessions), and there exist extensive

⁴ The April 2012 baseline survey covered 622 households or about 25% of the population. For details see Travers and Evans (2013), cited above.

data sets on threats to forest resources derived from *law enforcement patrol observations*. Parallel monitoring of biodiversity indicators also occurs.

A key innovation in Seima is the use of the Basic Necessities Survey (BNS) method as the core of the household level survey. This produces a participatory, locally appropriate measure of relative economic well-being that is cheap, simple, easy to analyse and avoids many of the data quality problems with more traditional income-based measures (see Box 1).

Box 1 BNS basics

The increasingly popular BNS methodology⁵ **measures well-being as the average level of household ownership of/access to a list of essential items/services** – for example does your household own a mobile phone? Does your settlement have a health centre? The list of ‘basic necessity’ items and services is developed locally through a participatory process and evolves over time, in line with changing aspirations and wealth levels. The **simple yes/no questions largely avoid recall and estimation errors and many other potential biases**.

The BNS is **very good for comparisons within a population** over time, over space and between social groups and **correlates well to other, harder to measure poverty indicators**. However, the absolute value of the score does not have an easily interpreted meaning so it cannot be related easily to the national poverty line, to average income or to surveys conducted elsewhere using different locally-generated lists of items. Nonetheless, many Cambodian forest-edge communities are likely to generate very similar lists, making some comparisons possible.

Principle 7 Indicator selection needs careful thought as the project can have impacts at a number of levels and across multiple social groups. Negative impacts may need different monitoring methods from positive benefits.

As implied by the conceptual model approach, in addition to indicators of general well-being, monitoring should also assess trends in the main threats to forest and land resources that contribute to well-being. A balance also has to be struck between obtaining full information and the additional burden of cost and time in collecting and analysing additional indicators. The range of indicators chosen for Seima is summarised in Box 2.

A broad concept of well-being should be taken, considering the multiple dimensions of a sustainable livelihood, rather than a narrow focus on material wealth (cash and physical assets) alone. Furthermore measures of transitory income should not be the main indicator of well-being as they are technically challenging to assess accurately with forest-edge households (because of the complex and variable nature of the income streams and the low numeracy of many of the people involved in supplying the data).

Indicators aimed at detecting positive impacts are unlikely to also pick up unanticipated negative impacts of a project, and so a complementary set of indicators is needed for these.

⁵ <http://mande.co.uk/special-issues/the-basic-necessities-survey/>

Box 2 Social indicators chosen for the Seima pilot project

Indicators were chosen at five broad levels.

1) The project will monitor *relative well-being* through trends in the Basic Necessities Survey score, and by comparisons of this score between social groups.

2) To track changes in those aspects of people's lives most directly affected by the project, two high-level social targets were defined (i) *Increase security and productivity of natural resources to support local livelihoods* and (ii) *Ensure sufficient farmland to support the livelihoods of current residents*. For each of these a number of candidate indicators was tested. The candidate indicators were developed for testing from a review of previous studies in the landscape and consultation with key informants such as senior staff at Seima and external researchers. Examples of these include: levels of resin tree ownership and harvest of other NTFPs from household surveys and perceived trends in the availability of specific forest resources reported during consultation meetings.

3) *Lower-level indicators* were also developed for the nine direct and indirect threats in the conceptual model. For example, the indirect threat from having insufficiently strong traditional institutions will be monitored through documented evidence of action by these institutions, and by periodic self-assessment of capacity by the institutions themselves.

4) The *implementation of activities* related to social outcomes will also be monitored.

5) A list of *potential negative impacts of activities* was developed through consultation and will be monitored as part of the annual consultation cycle.

Contextual information will also be collected on e.g. population size and location, legal and policy changes and key macro-economic trends such as preferred crops.

The CCB standard also requires monitoring of the status of 'High Conservation Values' (HCV), a concept derived from forest certification that is now widely used in natural resource management systems to ensure that the most important environmental and social values are being maintained or enhanced⁶. In the particular case of Seima no additional monitoring was required to generate the necessary information. The HCV framework of indicators seems unlikely to be required under UNFCCC rules but may be a useful element of a national safeguards information system, particularly in countries where the framework is already in use by key production sectors such as forestry or oil palm plantations.

Principle 8 Community participation in the selection of indicators is expected to increase their relevance and perceived legitimacy.

Indicators selected or refined through participatory approaches are likely to be more closely related to issues that stakeholders perceive as important, and more likely to be defined in a way that matches locally used concepts, units of measurement etc.

In Seima participatory approaches have been used throughout the process - for example to refine the household level survey, to develop the BNS list of items, and to develop the list of potential negative impacts.

D. Disaggregation of indicators by social group

Principle 9 Indicators should be designed to allow disaggregation, especially in relation to the impacts on vulnerable or marginalised social groups.

⁶ <http://www.hcvnetwork.org/>

Indicators should be measured at a population level and also allow the disaggregation of both qualitative and quantitative data according to key social groupings, particularly for those thought to be especially vulnerable. Gender and ethnic group (e.g. indigenous ethnic groups) are likely to be important criteria in almost all settings. Other factors such as degree of social vulnerability (e.g. single-parent families), degree of forest-dependence (those most exposed to REDD+ interventions), or geographical location may also be relevant. Some examples from Seima are shown in Box 3.

Box 3 Disaggregation of results for selected social groups in Seima

Some social groups were confirmed to be potentially vulnerable as shown by consistently low BNS scores (e.g. widow-headed households, families who sell labour and families with very little or no land). Some (especially recent migrants) may benefit less than average from project interventions since they lack land to title or the labour/skills to access forest products, indicating a possible area for adjustments in project design. Special interventions should also be considered in the commune (sub-district) noted to have the slowest recent improvements in BNS scores.

By contrast, the two overlapping categories of indigenous families and resin-tappers did not correlate with especially low BNS scores, or slower than average rates of improvement. This suggests that current levels of threats to these groups are being held at tolerable levels (in part probably because of past conservation efforts contributing to both land and forest resource security). However, the longer term outlook for these two social groups remains a cause for concern, and indigenous groups have special status in REDD+ policy debates. They are also among the groups likely to see the strongest positive effects from project activities. Therefore it is recommended to continue disaggregating the data for these groups in future.

E. Adapting the system to changing social circumstances

Principle 10 It is necessary to undertake regular reassessment of the structure and assumptions of the conceptual model and the choice of indicators

Regular reviews of both the logic for project interventions and the monitoring system design are needed, as the social context is evolving so fast in Cambodia. The monitoring program should feed back into that process by testing key links in the conceptual model.

Conclusions

The ten principles above highlight some of the complex issues that need to be considered in developing a national safeguards system, and relate them to one recent case study. Additional work is needed to propose a comprehensive system suited to the Cambodian context. It is hoped that such a system can be coordinated with, and if possible contribute to, the development of monitoring systems for the individual forest management units (e.g. Protected Forests, Protected Areas, forestry concessions and clusters of Community Forests) which will form the building blocks of the REDD+ program itself. In this way the monitoring system can help to promote improved transparency and a cycle of continuous improvement in on-the-ground forest management.



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