

Assessing the Sustainability of Community-Managed Forests A Proposal to the International Development Research Centre (IDRC)

Center for International Forestry Research (CIFOR)

28 November, 1996¹

Purpose

The aim of the proposed work is to better understand how sustainability can be observed, measured and evaluated in community-managed forests. The project seeks to link knowledge and practice in community forestry with an increasingly vast body of information concerning sustainability and its measurement. This research will be part of an on-going project to develop criteria and indicators of sustainability by the Center for International Forestry Research (CIFOR) in Bogor, Indonesia. Support at the level of \$220,000 is requested from the International Development Research Centre to support methodology development and coordination expenses.

The Project

Justification

In the worldwide effort to promote "sustainability," there has been a recognized need to develop a better understanding of *what sustainability is* and *how to assess it*. The debates about sustainability have been especially vigorous within the forestry sector, where the impacts of new forms of management, especially those involving local communities, remain unclear. As local forest management receives more legitimacy and formal responsibility for management increasingly shifts to local people in countries around the world,² it has become necessary to have acceptable methods for assessing the sustainability of community-based forest management. Many of these forests are still considered policy experiments, and policy-makers are anxious to know

¹ Revised version. Incorporates IDRC comments on 4 September, 1996 draft.

² Two kinds of community-managed forests can be recognized, those created through devolution of management authority of forest benefits to local people (such as Joint Forest Management in India, Integrated Social Forestry in the Philippines and reforestation programs through the Household Responsibility System in China) and those managed by communities already, without government intervention. Although many communities already benefit from and manage forests, their use of forests has often not been recognized as legitimate by the state. During the last 20 years governments have increasingly recognized the positive aspects of local management (e.g. more knowledge of the resource, continuous management presence, more commitment to long-term, cost-effectiveness) and have begun to recognize many "traditional" systems by acknowledging their legal rights to forest land and products.

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more about their social and environmental outcomes. Community members and NGOs in many areas are also eager to demonstrate the effectiveness of local management capabilities to attract government support for communities' legal access to forest resources.

At the same time that this need has been developing for community forests, work on practical, field-oriented means of observing and measuring sustainability on commercially-oriented, concession-managed forests has been moving rapidly ahead. Increasing international pressures for sustainable timber production and the potential "green market" value of many forest products have created a demand for standards of sustainability at the forest level. Interest in such standards escalated with the United Nations' Earth Summit in 1992 with the result that organizations charged with assessing forest management practices and certifying of forest products have now developed an assortment of principles, criteria and indicators for evaluating sustainability.

The development of these sets of criteria and indicators creates several opportunities for strengthening community-based management. First, the criteria and indicators establish a common language for discussing sustainability and a set of reference points for its assessment. In doing so, they provide a means for those concerned with promoting community forests to monitor and then demonstrate the viability of the systems (or their problems and challenges) to policy makers. Criteria and indicators can therefore become a powerful advocacy tool at the national level. The second opportunity for strengthening community-base management is at the international level. Since the 1992 Rio discussions a number of international initiatives have been launched to promote forest sustainability, especially the Intergovernmental Panel Forests of the Commission for Sustainable Development. Community-managed forests in the tropics have been relatively invisible in these discussions, in contrast to industrial forests or private smallholder forests in Europe. One of the themes that most consistently attracts attention in these fora is the measurement of sustainability. The development of criteria and indicators specifically for community forests in the tropics would be an important mechanism by which community-managed forests could, again, communicate their viability, and gain visibility in these international discussions. The resulting understanding could contribute to international incentives for national governments to learn more about these kinds of systems.

Despite these powerful applications of sustainability criteria and indicators, the relevance and viability of individual criteria and indicators is still very much under debate. There has been an increasing demand for evidence of how criteria demonstrate sustainability and how those criteria can best be measured on the ground under diverse circumstances. Most importantly, few of these methods have been developed specifically for community-based forests which may include timber as well as non-timber forest products, and often seek to meet social as well as production and ecological objectives. To date, there has been no systematic attempt to bring together the experiences in community-based management with these emerging concepts and tools for measuring sustainability.

Since many of the assessment techniques are new or still in a developmental phase, it seems timely to review the methods and promote discussion that will enhance their further elaboration and evolution. A study of sustainability criteria would provide a platform for such debate and could be used to promote the sharing of ideas concerning sustainability assessment among a broad community of practitioners, policymakers, donors and scholars.

Objectives of the Community Forest Studies

CIFOR therefore aims to identify, generate and test criteria and indicators for assessing the sustainable management of forests by local communities. The intent is to review selected criteria and indicators for measuring sustainability and provide an analysis of their comparative strengths and weaknesses as they are applied in the field. The ecological, social and economic/production aspects of sustainable management will be examined. It is not the purpose of the project to develop a single definition of sustainability for community-managed forests, nor to test whether management in a given community is sustainable. *The outputs of the research are intended to serve as tools for those wishing to develop or improve their own criteria and indicators, including communities, certifiers, government agencies and others concerned with the monitoring or assessment of sustainability.* These tools should ultimately be useful for answering the question “is community forestry sustainable?” The results should thereby help to demonstrate the conditions under which community-based management “works.”

Definition of Community-Managed Forests

Community-managed forests are defined as those in which local people have a primary³ role in management decisions and receive a significant share of the benefits from the forest.⁴ This research will focus on areas where the threats to ecological and social sustainability are perceived as being highest in natural forests managed by local, long-term, so-called “traditional” forest dwellers. These people will be identified as users of the forest who depend on the forest for their livelihoods and also claim historical rights to the forest and its products. Management, in the form of decision-making, intentional manipulation of the forest or sanctions and controls over forest use must be in place, since one of the objectives of the research is to measure the sustainability effect of management. Although these forests may be managed by a

³ The words “primary” and “significant” here are used to recognise that many forests managed by communities are legally owned by the state and that the state, or other parties may derive some benefits from the forest. Community forests are distinguishable in that the community plays a primary role and is dependent on the forest. Where communities formally collaborate in management or share benefits with another party (usually government), these arrangements are referred to as co-management. Co-management is therefore one type of community-management. The sites selected for this study will focus on the communities, although it is recognised that the community is usually not a solitary actor or beneficiary.

⁴ To assess sustainability criteria, we will choose sites where most criteria can be applied. By selecting a site acknowledged to represent relatively sustainable conditions, more criteria can be tested and indicators observed than under conditions relatively less sustainable. We already know a fair amount about what is unsustainable, but these studies seek to identify practices and conditions positively related to sustainability.

collective social group, we recognise that decisions will occur along a spectrum from the individual and household to the community and even state. As is typical of most community forests, there are likely to be a number of different interests with competing claims to the forest. This competition and any accompanying conflict will form an important subject for sustainability assessment. Similarly, the extent of involvement in forest management and sharing of benefits *internally* in the community (including between men and women) will be a topic for assessment. Methods for identifying relevant stakeholders will follow those outlined in Colfer,⁵ namely by identifying the roles of diverse social groups in forest management and the range of impacts forest management may have on these groups.

Relationship to other CIFOR Projects

The proposed community forest research would contribute to and benefit from the work of two related projects at CIFOR, the *Project on Livelihoods, Community Management and Devolution* and the *Project on Testing of Criteria and Indicators of Sustainability*. The first project addresses the problem of how to jointly improve local people's livelihoods and their forest management. It seeks to improve understanding of the relationship between the forms of local forest management and its impacts by asking the question "how do incentive structures and institutional arrangements affect household well-being and local forest sustainability? The proposed methodological work on sustainability strongly complements the topical questions posed in the Community Management Project. The methods to be developed would provide a set of conceptual tools for devising locally appropriate measures of impact, as well as contribute to the development of measures for comparing sustainability across different sites.

The proposed work on community-based management also contributes directly to the Project on Testing Criteria and Indicators. In August 1994, CIFOR initiated an 18-month study to test criteria and indicators for their relevance, feasibility and acceptability in concession-managed natural forests in Latin America, Africa, Asia and Europe.⁶ The CIFOR project team also began developing methods for the evaluation of criteria and developing a framework for evaluating the sustainability of forest management as a whole. Details of the project's first phase of activities (including

⁵ Working Paper No. 7, Oct. 1995. Who Counts Most in Sustainable Forest Management?

⁶ The research on criteria and indicators was based initially on assessing criteria and indicators in certification systems, where much of the experience, demand and debate has been situated. The definition of criteria and indicators is discussed at length in Prabhu et al. (1996). Briefly, a criteria is "a standard by which something is judged. An indicator is an observable component of the forest ecosystem used to infer whether criteria have been met". The research seeks to establish ways of measuring these criteria and indicators at the forest management level. This focus limits the criteria and indicators tested to those systems such as SmartWood, Woodmark, Lembaga Ekolabel Indonesia, African Timber Organization and the Deskundigen-Werkgroep Duurzaam Bosbeheer. Systems for development of criteria and indicators such as the Helsinki, Montreal and Tarapoto processes were explicitly not part of the research as they focus on national rather than forest-level management. The project has since evolved to consider other relevant criteria & indicators. These criteria and indicators are seen as important tools for meeting not only needs of certifiers, but also for monitoring and assessment of the sustainability of forestry activities in general.

objectives, structure and methods) are reported in Prabhu et al. 1996.⁷ The second phase of the Testing Criteria and Indicators Project began February 1996. This phase has expanded the Project to include different forest types and address significant issues in more depth. One of the new forest types CIFOR hopes to examine and compare with other forest types is community-managed forest. Two related issues that CIFOR staff are giving attention to for in-depth work are the relationship of community participation and land tenure to sustainability.

Both CIFOR projects have adopted a general definition of sustainability consistent with the definition of sustainable development used by the World Commission on Environment and Development.⁸ Sustainable forest management is considered to be *a set of objectives, activities and outcomes consistent with maintaining or improving the forest's ecological integrity and contributing to people's well-being both now and in the future*. This definition requires examining ecological, social and production parameters, and includes both consideration of silvicultural treatments and the economics of forest product harvesting, aspects of sustainability.

Methods

The community forestry studies will draw criteria and indicators from several sources and seek to develop additional criteria and indicators where gaps are found. Sources include criteria and indicators used by timber certifiers, Woodmark (Soil Association, Responsible Forestry Standards), the SmartWood Program (Rainforest Alliance) and the Lembaga Ekolabel Indonesia. Other sources will include monitoring guidelines, such as those used by the Biodiversity Conservation Network; the indigenous knowledge literature and scholarly studies, especially research on common property and collective action.

Site selection is presently being conducted in consultation with local communities, local trade unions, NGOs, scholars, donors, national partners and advisory groups. Studies are likely to be conducted in humid lowland forests of Indonesia, Brazil, and Cameroon⁹ to capture diverse conditions of local forest management as well as to build on existing local expertise and interest in forest sustainability discussions. Site selection will be completed by February 1997. Among the three sites selected, an effort will be made to maintain similar ecological and social conditions to the extent possible. Other selection criteria to be considered are the degree to which the site is a strong example of what is thought to be sustainable management,¹⁰ the site's potential importance as a model for

⁷ CIFOR Special Publication. 1996. Testing Criteria and Indicators for the Sustainable Management of Forests: Phase 1. Final Report.

⁸ "Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future".

⁹ These are countries where local organizations have taken a major interest and lead in assessing sustainability, for example through the Lembaga Ekolabel Indonesia, the Tarapoto Agreement and the African Timber Organization respectively. Although there have been discussions in each of these countries about measuring sustainability in community forestry, these efforts have not been formally tested and analyzed.

¹⁰ To assess sustainability criteria, we will choose sites where most criteria can be applied. By selecting a site acknowledged to represent relatively sustainable conditions, more criteria can be tested

national policymakers, the willingness of the community and other involved parties to work with the project and the presence of natural, managed forests. The forest would not necessarily have to be managed for timber production.¹¹

The selection of study teams for each site has also recently been initiated. The selection of study team members is also being conducted in a participatory manner with local partners. Team members for each country will be selected to reflect individuals with a long-term relationship with and in-depth understanding of the study site. It is assumed that the team members' rapport with the community and their considerable experience in working in the area will facilitate and inform the project to a level of depth not otherwise possible. In addition, this arrangement should allow the CIFOR study to build on and contribute to efforts already in place. Team members will be sought who explicitly have experience in community-based forestry and issues related to sustainability, as well as excellent field research skills, and good writing and communication abilities in English and the local language. For each country study, a team of three people, representing a forester, ecologist and social scientist respectively, will be composed to work together at one site.¹² One person shall be appointed team leader.

A Methodology Development Workshop will be held to bring together the prospective team leaders with resource people from each of the three study areas to develop a first iteration of a comprehensive set of baseline criteria and indicators specific to community forestry and to conduct a "dry run" study to refine the field methods. This activity will be conducted in Indonesia for logistical efficiency. The exercise should orient the team leaders rapidly to the research objectives and help produce an initial set of criteria and indicators more appropriate to community-managed forests. Resulting data would not be used as part of the formal analysis. Experience over the past two years indicates that one of the most time-consuming aspects of the project is orienting each team. This initial exercise would be an attempt to more efficiently ensure that each team leader can implement the field study with a running start. The exercise will take place in January-February 1997.

The communities hosting the studies will be asked to participate in defining sustainability in terms relevant to them. By working with the community, the study will develop criteria and indicators on a site-by-site and community-by-community basis to reflect local needs and perceptions for assessing sustainability. In this way the research will combine a "standards" approach (reflecting widely accepted and comparable principles for sustainability) with a more process-oriented approach (reflecting

and indicators observed than under conditions relatively less sustainable. We already know a fair amount about what is unsustainable, but these studies seek to identify practices and conditions positively related to sustainability.

¹¹ Although it would be useful to test the final set of criteria and indicators in a number of additional sites with "unknown" levels of sustainability, this would require significant additional resources which are presently unavailable. Such replication could be conducted in a second phase of research, or preferably, would occur as organizations test the new criteria and indicators for themselves in their own work.

¹² Team members will be provided contracts for 30 days, with their time allocated as follows: 5 days for preparation, 5 days travel (international and domestic), 15 days fieldwork, 3 days writing report and 2 days participating in the final workshop.

community input and site conditions) to develop an *adaptive methodology* for measuring the sustainability of community forest management. Such an approach could be used more generally to enable other internationally developed criteria and indicators to be adapted to the heterogeneous local conditions found among rural communities and their forests .

The results of the study will be shared with the community. It is important to emphasise that the studies will not be assessing sustainability of the community's management efforts, but rather developing a method against the backdrop of a particular forest and group of people. Similarly, the research is not intended to be a "community-based" study, which would require a much longer time frame for design and implementation to understand the conditions of a specific site and social group. Instead, it purposefully seeks to draw the input of diverse stakeholders to bridge the practices and knowledge systems of communities with an outside body of information on sustainability assessment methods. It would be unfair to the communities to build up expectations of some more direct impact of the work. Instead, the final set of methods and criteria and indicators developed by the project should be a tool useful for communities (and others) to subsequently develop their own means for monitoring and demonstrating the sustainability of their management practices. It is hoped that this approach would enable the results to ultimately be generalizable to a larger number of communities around the world.

The details of the methods followed in the actual field studies will be discussed and refined in the methodology development workshop. The initial plan would require each team member to select from comprehensive list of criteria and indicators prepared during the methodology development workshop what they judge to be the 20 criteria and indicators most relevant to assessing sustainability in their area of expertise (social, ecological, management). This exercise will require approximately five days of team members' time and will occur several weeks before the field studies. Team members will review the sources, prioritise among criteria, add additional criteria as they deem necessary and identify indicators for measuring these criteria in the field. Their selection will be discussed with the community upon arrival at the site to acquire the communities' viewpoints and their own perceptions of sustainability. The team will spend the first two days of the field study working with the community in this way and making adjustments as necessary.

During field work, team members will study approximately two of their selected criteria or indicators per day, with five days set aside for discussion and writing. The purpose of the field study is to see how well each criterion or indicator "performs" in a field situation. For each criterion, the study will seek to assemble existing indicators and develop additional indicators as necessary. Using these indicators, criteria will then be assessed in the field in terms of their **relevance** to sustainability and the **feasibility** of their measurement. During, and subsequent to the field studies, team members will also involve stakeholders, including community members in assessing the **acceptability** of the criteria. Each criterion will be scored and annotated with the evidence providing a basis for the score. At the end of each country study, experts would provide a summary of the most highly rated criteria, as well as an analysis of the advantages, disadvantages, trade-offs and issues associated with each. They will also be asked to evaluate the study

methodology. The team leader will be responsible for assembling the individual reports and commenting on the complete set of selected criteria. Additional details about the study methodology are provided in Attachment A.

Each field study will conclude with a workshop among study team members, resource people and representatives of different stakeholder groups. The purpose of these workshops will be to further analyse and discuss findings. The acceptability of criteria will also be tested with questionnaires to stakeholders participating in the meeting.

Test participants will attend at least one of the periodic workshops organised under the larger Project on Testing Criteria and Indicators. The purpose of these workshops is primarily for collaborators from different test sites to compare results. Criteria will be examined in the broader context of more diverse users and settings.

A social science research fellow, Nicolette Burford de Oliveira, joined CIFOR in September 1996 to coordinate the project. (See Attachment B for CV). Based in Bogor, she will further develop the field methods, coordinate the site selection process, join the teams as a resource person, analyze the results of the study and produce a final report on the analysis of sustainability in community-managed forests. The final report will summarize the scope of the principles and criteria presently in use, additional principles and criteria deemed necessary, the performance of selected criteria, methods for developing criteria and a discussion of the most generic, well-performing criteria. Criteria will also be assessed for their performance under different regional conditions. Areas of debate, controversy or lack of knowledge will be highlighted in the effort to more clearly define issues and thereby provide a basis for further discussion and debate.

The final product will therefore be:

- A concept paper discussing the principles of sustainability for community-managed forests and presenting a preliminary table of criteria and indicators.
- A methodology for producing “adaptive standards” for measuring sustainability, i.e. methods that combine internationally accepted standards with a process for adapting those standards to local conditions.
- Country reports on the experience of individual studies
- A final report with an analysis of the
 - (1) Generalizability versus site-specificity of the criteria and indicators tested
 - (2) Cost-effectiveness of criteria and indicators
 - (3) Relevance (especially in terms of being linked causally of criteria and indicators to sustainability
 - (4) Acceptability to different stakeholders
- Articles describing our findings in newsletters such as the ITTO Tropical Forest Update, Common Property Digest and the Criteria and Indicators Update (CIFOR).

The intention is not to produce a CIFOR set of universal criteria and indicators, but to stimulate a process that would allow communities, government agencies, NGOs and others charged with assessing sustainability to begin prioritising among criteria and indicators. To this end, the process of undertaking the studies themselves will be an important output in its own right. Experience from the first phase of work suggests that

the workshops and subsequent informal discussions create as much or more of an impact than any single document. Through the workshops and the participation of our in-country collaborators we hope to constructively advance the debates about sustainability to enable national institutions and certifying organisations to better pursue their own initiatives related to sustainability.

Project Organisation

The advisory committee structures of the Project on Testing Criteria and Indicators of Sustainability will be used, including the International Project Advisory Panel (IPAP) and the Scientific Advisory Group (SSG). It will be important to add members representing organisations active in or knowledgeable about community-based forestry.

Within CIFOR, responsibilities for the community forestry studies will be divided among the present Criteria and Indicator Project Coordinator, Ravi Prabhu, the Community Forest Project Coordinator, Eva Wollenberg and Nicolette Burford de Oliveira, the Research Fellow. The Research Fellow would take primary responsibility for preparing and implementing the studies. Eva Wollenberg will supervise the project and provide social science back-up support, together with Carol Colfer, Principal Social Scientist at CIFOR. Ravi Prabhu and other CIFOR staff will provide back-up on the ecological and management components of the studies. As Project Coordinator, Dr. Prabhu would also ensure that the results of the community forestry work are linked with other activities of the project.

Budget

The scale and nature of activities undertaken will depend in part upon the level of funding received from donors. CIFOR is presently requesting \$220,000 from the International Development Research Centre. The Ford Foundation has committed support of \$129,000. The Swiss Development Corporation has provided \$150,000 in support, USAID \$35,000, the MacArthur Foundation \$20,000, and CIFOR has provided \$35,000 of core funds. The additional funds from International Research Development Centre would be used to support the important preliminary phase of methodology development and contribute to approximately one third of the coordination expenses, which include preparation and publication of the final report.

Estimated Budget

A. Coordination

CIFOR research fellow (\$45,000/year plus benefits \$98,000/year) for 2 years	\$ 196,000
Workshops: travel and per diem	
- CIFOR Research Fellow	
to attend 3 IPAP/Scientific Support Group meetings	7,500
to attend 3 coordination workshops	7,500
- One CIFOR staff to 3 attend coordination workshops/advisory mtg.	7,500
- Two invited developing country social scientists to each attend 4 coordination workshops (\$2,500/person)	20,000
General supplies and communications	5,000
Research Assistant (50% time for 20 months)	10,000
Misc. Travel to related workshops sponsored by other organizations	5,000
Report editing and publication (1000 copies)	15,000
<i>Subtotal</i>	\$ 273,500

B. Methodology Development

Trial study in Indonesia

Team member expenses:

Honorarium 6 people (3 team leaders & 3 resource people) \$300/day x 16 days	\$ 28,800
Per diem 6 people	
\$40/day x 8 days at field site	320 x 6 = 1,920
\$110/day for 2 days transit (6 days preparation and follow-up at homebase)	220 x 6 = 1,320
Travel to field site 6 x \$2,000	12,000
Travel and per-diem for participation of 3 people in 1 coordination workshop each \$2,500 x 3	7,500
CIFOR Research Fellow	
Per diem	
\$40/day x 8 days at field site	320
\$110/day for 2 days transit	220
Travel to field site (allow for possibility of int'l travel)	1,500
Travel at the study site	
Rental of 2 four-wheel drive vehicles \$200 x 10 days	4,000
Supplies and communications for trial study	2,000
<i>Subtotal</i>	\$ 59,580

B. Field study

Indonesia

Team member expenses:

Honorarium 3 people \$300/day x 30 days		\$27,000
Per diem 3 people		
\$55/day x 15 days at field site	825 x 3	2,475
\$100/day for 4 days transit	400 x 3	1,200
(10 days for preparation and follow-up at homebase)		
Domestic travel to field site 3 x \$500		1,500
Travel and per-diem for participation of 3 team members		
in 1 coordination workshop each		6,000
CIFOR Research Fellow		
Per diem		
\$55/day x 15 days at field site		825
\$100/day for 4 days transit		400
Travel to field site		1,500
CIFOR staff (two)		
Per diem		
\$55/day x 15 days at field site	825 x 2	1,650
\$100/day for 4 days transit	400 x 2	800
Travel to field site		1,000
Logistics assistant (for field site back-up) 20 days x \$30/day		600
Travel at the study site		
Rental of two four-wheel drive vehicles \$200 x 20 days		8,000
Follow-up data collection (e.g. questionnaire, telephone interviews		
library materials)		1,500
Supplies and communications		2,000
<i>Subtotal</i>		\$ 56,450

Western Amazon

Team member expenses:

Honorarium 3 people \$300/day x 30 days		\$ 27,000
Per diem 3 people		
\$115/day x 15 days at field site	825 x 3	5,175
\$125/day for 4 days transit	500 x 3	1,500
(10 days for preparation and follow-up at homebase)		
Domestic travel to field site 3 x \$500		1,500
Travel and per-diem for participation of 3 team members		
in 1 coordination workshop each		6,000
CIFOR Research Fellow		
Per diem		
\$115/day x 15 days at field site		1,725
\$125/day for 4 days transit		500
Travel to field site		3,297
CIFOR staff		
Per diem		
\$115/day x 15 days at field site		1,725
\$125/day for 4 days transit		500
Travel to field site		3,297
Logistics assistant (for field site back-up) 20 days x \$30/day		600
Travel at the study site		
Rental of two four-wheel drive vehicles \$200 x 20 days		8,000
Follow-up data collection (e.g. questionnaire, telephone interviews		
library materials)		1,500
Supplies and communications		2,000
<i>Subtotal</i>		\$ 64,319

Africa (West Africa or a Miombo woodlands site in southern Africa)

Team member expenses:

Honorarium 3 people \$300/day x 30 days	\$ 27,000
Per diem 3 people	
\$90/day x 15 days at field site	1350 x 3 4,050
\$140/day for 4 days transit (10 days for preparation and follow-up at homebase)	560 x 3 1,680
Domestic travel to field site 3 x \$500	1,500
Travel and per-diem for participation of 3 team members in 1 coordination workshop each	6,000
CIFOR Research Fellow	
Per diem	
\$90/day x 15 days at field site	1,350
\$140/day for 4 days transit	560
Travel to field site	3,850
CIFOR staff	
Per diem	
\$90/day x 15 days at field site	1,350
\$140/day for 4 days transit	560
Travel to field site	3,850
Logistics assistant (for field site back-up) 20 days x \$30/day	600
Travel at the study site	
Rental of two four-wheel drive vehicles \$200 x 20 days	8,000
Follow-up data collection (e.g. questionnaire, telephone interviews library materials)	1,500
Supplies and communications	2,000
<i>Subtotal</i>	\$ 63,850
<i>Subtotal</i>	\$ 517,699
<i>Overhead (13 %)</i>	67,300
<i>TOTAL</i>	584,999

Rounded to \$585,000

Total expenses for Community Forest Studies (Phase II)	\$ 585,000
Contribution from other donors and CIFOR (63% of total)	\$ 369,000
Balance outstanding	\$ 216,000
Amount requested from IDRC (rounded)	\$220,000

Attachment A

Methods Proposed for Community-Managed Forest Studies

Methods subject to revision during methodology development workshop and after consultation with the communities at each site

Evaluation of Criteria

The purpose of the field studies is to evaluate the suitability of selected criteria. To this end, three aspects of criteria will be examined in detail: the criteria's **relevance** to sustainability, their **feasibility** of measurement in the field and their **acceptability** to diverse stakeholders. Expert teams will be given a response form with questions (see below) and asked to complete the forms for the 20 criteria they have given priority to in their area of specialization.

To complete the forms, the team members could elect to simulate assessment for a given criterion, interview local people, interview colleagues on the team, interview stakeholders, review local records, examine the availability of information for specific indicators, measure the range of values for a given indicator or collect data on the relationship between an indicator and a criterion. Some of the information might be collected after the field test is completed, e.g. survey of stakeholders during the workshops. It will be left to the team members to determine the techniques they use to answer the questions below. A basic tenet of the project is to foster flexibility and creativity among the team members to the greatest extent possible.

The completed response forms will then provide the logical and empirical basis for each expert's discussion of the criteria's strengths and weaknesses. The forms and accompanying discussion for each country will then be synthesized for a more general discussion of results.

Field Study Questions

Experts will be asked to answer the following questions for each criterion and its associated indicators.

1. Relevance: Is there a relationship between this criterion and sustainability?

1.1 Is this criterion associated with processes likely to lead to sustainability or is it evidence of an existing sustainable system?

1.2 Can a causal relationship be demonstrated between this criterion and sustainability?

-Is there a plausible logical relationship?

-Is there empirical evidence for this relationship?

-Is there a chronological relationship (x occurs before Y)

-Is this condition necessary/sufficient for sustainability to occur?

1.3 Can an associative relationship be demonstrated between indicators and sustainability?

-Is there a plausible logical relationship?

-Is there empirical evidence for this relationship?

-Is this condition necessary/sufficient for the criterion to occur?

1.4 What is the relevance of this criterion relative to other criteria?

1.5 For each criterion, which indicators are most relevant to assessing sustainability?

1.6 If answers cannot be provided to the above, what additional information do we need?

2. Feasibility: What is required to measure this criterion?

2.1 How much time is required per indicator?

2.2 What kind of information is necessary for each indicator? (documents, interviews)

2.3 Where does the assessor need to go to measure each indicator?

2.4 How likely is it that this indicator will be found under diverse ecological and social conditions?

2.5 What is the cost effectiveness of measuring this indicator?

2.6 What kind of expertise is necessary to measure this indicator?

3. Acceptability: Do stakeholders view this criterion and its indicators as a meaningful measure of sustainability?

3.1 Is the criterion compatible with this stakeholder's definition of sustainability?

3.2 Were they previously acquainted with this criterion or its underlying concept as a measure of sustainability?

3.3 Do they consider the indicators associated with a criterion as objective?

3.4 Are the methods of acquiring information acceptable according to the standards of this stakeholder?

3.5 How confident is this stakeholder that the indicators provide sufficient evidence for a given criterion?

3.6 How would this stakeholder rank the criteria in order of importance?

Ranking questions (related to criteria and indicators) will be conducted within each area of expertise as well as for all criteria. Stakeholders not present at the field site would be sent a questionnaire or interviewed/surveyed at the workshops.

Stakeholders could include local communities, local government officials, traders, consumers, policy-makers, academics, local project teams, environmentalists and certifiers.

Sample Schedule of Country Teams

One month prior to studies:

CIFOR sends briefing package with

- Overview of study methodology and project background
- Sources of criteria and indicators
- Background information on study site
- Assessment forms
- Biographies of team members

Day 1-5 Preparation at homebase (*three days*)

- Review project and methods
- Review criteria
- Select 20 most relevant criteria to ecological, management or social sustainability depending on team member's area of expertise. Add own criteria if necessary.
- Write summary of basis for prioritization (one page).
- Begin identifying indicators to study in the field (from existing sources or develop new ones)

Day 4 - 24 Field studies (*15 days + 5 days travel*)

- Travel to and from site (4 days)
- Orientation and preparation (2 days)
 - identification of stakeholders
- Testing of criteria (approximately 10 days, 2 each day per team member)
- Team discussions (3 days)

Day 26 - 27 workshop (2 days)

Day 28 - 30 Follow-up and writing (*three days*)

- Follow-up data collection if necessary
- Completion of response forms and reports

Team Leader submits final country report to Project Coordinator.