Practical guide for socio-economic livelihood, land tenure and rights surveys for use in collaborative ecosystem-based land use planning

Nining Liswanti, Bayuni Shantiko, Emily Fripp, Esther Mwangi and Yves Laumonier
Guideline

Practical guide for socio-economic livelihood, land tenure and rights surveys for use in collaborative ecosystem-based land use planning

Nining Liswanti
CIFOR

Bayuni Shantiko
CIFOR

Emily Fripp
EFECa

Esther Mwangi
CIFOR

Yves Laumonier
CIRAD-CIFOR
Table of contents

Part A: The approach 1
   Aim of this guide 1
   What is collaborative land use planning? 2

Part B: Undertaking socio-economic surveys 3
   Step 1 – Survey design, sampling and data requirements 3
   Step 2 – Planning and training the team 5
   Step 3 – Implementation 7

Part C: Using the data collected 11
   Step 1 – Data analysis 12
   Step 2 – Using the results 13

Resources 15
   Websites 16
Part A: The approach

Understanding the socio-economic conditions, land tenure and rights of communities is a critical aspect of collaborative land use planning.

Aim of this guide

This guide aims to provide practical steps for field-based practitioners to follow in conducting socio-economic surveys of households and villages, including focus group discussions and key informant interviews. This guide is accompanied by nine Supporting Notes. These are essential tools for gathering socio-economic information, the results of which can be used as input to collaborative land use decision-making tools and procedures.

Socio-economic survey tools are designed to collect information as a means of improving understanding of local resource management systems, resource use and the relative importance of resources for households and villages. Surveys also provide information on interaction with the government decision-making systems and community perceptions of trends and priority issues. Knowledge about community-based institutions, which is also obtained, and their roles in the sustainable use and conservation of natural resources, helps to facilitate or reinforce a consensus on land tenure and rights for the region, now and in the future.
Thus, the use of these tools also serves to highlight possible avenues for conflict resolution between stakeholders. Conflicts over resources often arise in the absence of a clear boundary and respect for institutional arrangements for the land.

**What is collaborative land use planning?**

Collaborative land use planning involves working with all stakeholders – government, local communities, private sector and other relevant individuals – to ensure that the land is used sustainably, avoiding negative impacts or threats from environmental degradation and forest loss while ensuring that the social and economic considerations of all users are accounted for. With particular respect to communities, collaborative land use planning therefore has the following aim:

*To ensure that land use planning decisions are made with consideration of local communities’ opinions, land use needs and socio-economic conditions (opportunities and constraints), including rights of access to and use of land.*

The first step in this process is to engage local communities. This can be achieved through the use of household and village surveys, in conjunction with focus group discussions. This is an important way of positively engaging local stakeholders in the planning process and in ensuring that local voices are heard. Surveys and focus group discussions also provide a way to gain a thorough understanding of local people’s relationship with the relevant resources – economic and social – and their legal rights and access to the use of resources. This information is imperative for effective land use planning, that is, planning that will work in practice and that meets local needs, thus potentially avoiding conflict among people over resources. Key terms are defined in Supporting Note 1.
Part B: Undertaking socio-economic surveys

Undertaking household and village surveys and focus group discussions in order to understand livelihoods, tenure and rights

Step 1 – Survey design, sampling and data requirements

When conducting a survey, the first step is to determine the **objective and purpose of the survey**. This will provide the framework for the content and scope of the survey work and be used to help identify which kinds of stakeholders and communities are to be surveyed.

Data requirements and survey design

The data to be gathered through the survey process will need to reflect the purpose of the survey work. In developing the survey, other considerations are the length of time for the interview and thus the resources (financial, human) needed to effectively conduct the surveys, enter the data and analyse the results.

Different tools (surveys, discussions, interviews) are used to obtain different types of information from different groups of informants. For example, household surveys can be used to gather information on age, gender, education, income sources (agriculture, forest and employment), perceptions of change in land use and access to forest resources. By contrast, understanding of the functions (governance and institutional) of the village, development, broader issues on access to land, population growth, social conditions and constraints can be gained through focus group discussions and interviews with key informants. These survey methods are explained in Step 3: Implementation.
Who should be included in the survey(s)?
The individuals and communities to be surveyed should be decided when considering the objectives and purpose of the survey. Different individuals or groups of individuals will be interviewed depending on the data needed. For a household-level survey, a representative of the household should be interviewed, but the village head or traditional leader will be interviewed in a key informant interview. Focus group discussions will include members of the community, with groups formed based on age and gender. More details are in the sections below.

Random sampling and sample size
The sample size needs to be sufficient to ensure that the survey results will be statistically relevant. However, in many cases, the sample size also has to be balanced with the available resources – financial, human and time.

Random sampling is used to ensure that the sample is representative of the study area, while avoiding bias in the results and ensuring that all elements of the population have an equal chance of being interviewed. There are a number of approaches to determining a random sample, e.g. systematic, stratified and
clusters. For the purposes of collaborative land use planning, a simple random sample approach is sufficient (Supporting Note 2).

**Types of questions**

For all interview types (household interviews, focus groups and key informants), questions can be structured and asked as open, closed or partially open questions. The type of question used will depend on the information that is being gathered. There are advantages and disadvantages of all question types (Supporting Note 3).

Through an open question, such as ‘Why has the paddy rice harvest declined this year?’, the interviewer can uncover the meaning behind an answer, allowing respondents to provide examples and explain their answer. These questions are more time-consuming to administer and analyse. Open questions can be difficult to ask and interpreting the responses can be complex, so training is essential.

A partially open question, such as ‘Consumption of forest products has increased, because …’ requires the respondent to elaborate on any answer given. The advantages of these questions are that they are quicker and easier to ask and to analyse than open questions, but the interviewer may miss some information because of the lack of an appropriate category or the level of detail in the response. To avoid these problems, the respondent’s answers should be recorded in full, and the interview should repeat the question if the respondent has answered insufficiently.

Closed questions, such as multiple choices or yes/no answers, are used when key information is required, without the need for further explanation or in-depth understanding of the answer or issue. These questions are quick to ask and to analyse; however, the answers may result in a lack of depth and clarity.

**Step 2 – Planning and training the team**

A well-trained and experienced team is essential for the success of any socio-economic survey. Previous practical experience is a great asset to the team, with relevant technical knowledge in socio-economics, forestry and natural resources, for example.

All members of the team will require rigorous and robust training in all types of survey (household, village, focus groups, key informant interviews) to be conducted. All members of the team should have a thorough understanding of the aims of the work and the meaning of every question to be asked. A combination of classroom and field-based training will provide the best understanding of survey
Oh no...! The road is flooded out!

How much further is it?

We’ve been travelling a whole day and haven’t managed to land a single interview subject.

It is important to plan your survey:
- Prepare a list of interview subject options
- Know the route to the village you are visiting
- Calculate your trip distances a head of time

The village we are headed to is still behind that mountain...
methods and procedures. In addition, field training is very useful for checking the survey questions and means of data collection, thus providing an opportunity to make any necessary revisions to the survey and interview questions and procedures.

Consideration should also be given to the division of tasks between team members – facilitator, resource manager, observers/recorders, team leader.

Thorough preparation (designing the survey work, training the team, etc.) and scheduling the survey work are essential for a successful survey (Supporting Note 4). Preparation of the survey team and agreeing on the work plan and timeframe for completing the surveys should be finalised in advance. Villages should be given due notification prior to survey work and permission to conduct interviews should be sought and granted.

**Step 3 – Implementation**

Survey approaches vary. Different approaches are used for different purposes. For the purpose of collaborative land use planning, three survey methods are used:

- Key informant interviews
- Household surveys
- Focus group discussions

Before commencing any survey work, a community meeting should be held.

**Community meetings**

A community meeting is a valuable and productive way for the survey team to meet with the villagers, explain the survey work – its aims and approach – and ensure that all members of the community understand the expected outcomes of the survey work (Supporting Note 5). A decision to conduct a community meeting should be made only after meeting the community or village head. If possible, the village head can then help set up and conduct the community meeting.

**Key informant interviews**

Key informants are individuals who are deemed to have knowledge of particular issues. Key informants will provide the interview team with detailed information and, importantly, interpretation of key issues that other members of the community may not be able to provide. Potential key informants should be selected, in consultation with the village head, traditional leader or head of clan, for an in-depth interview with the survey team (Supporting Note 6).
Village and household surveys
Village and household surveys are used predominantly to collect quantitative and qualitative data, through structured interviews with the head of the household, using both closed and open questions. Survey forms for both household- and village-level surveys are designed to gather specific information, relevant to the survey objective, as discussed above.

Focus group discussions
A focus group discussion aims to elicit in-depth information on the concepts, perceptions and ideas of a group of 6–12 people. Ideally, a focus group discussion is an iterative process, whereby each discussion builds on previous discussions by developing a topic or emphasis on certain aspects (Supporting Note 7).

In the context of a collaborative land use planning project, a focus group discussion could include discussions on institutional arrangements, community rights, community access to forest, the use of forest by the community and sustainable management of forest resources.
Key to the success of the focus group discussion is the presence of a strong facilitator who will stimulate discussion and ensure that it is aligned with the objectives of the survey team.

It is beneficial if other research instruments such as key informant interviews, in-depth interviews or other qualitative techniques are used in conjunction with focus group discussions.

Survey forms used for household and village surveys, key informant interviews and focus group discussions are reproduced in Supporting Note 8.
Part C: Using the data collected

Analysis and use of the collected data should reflect the objectives of the survey

The extent of analysis and use of the data collected will depend on the survey objectives and expected end uses. For collaborative land use planning, the survey results will provide, first, a robust baseline of socio-economic factors related to land resources and their use; and second, detailed insight into the community institutions, their relationship with land use planners (e.g., government bodies) and any potential areas of conflict. Together, this information can be used to develop collaborative land use decision-making tools.
Step 1 – Data analysis

The choice of method for data analysis will depend on the volume of data collected and the expected uses of the findings.

Where household- and village-level surveys are conducted, significant volumes of data will be collected. Analysis of this volume of data is usually done in a statistical package such as SPSS. Using such packages also allows the data to be entered and cleaned before analysis. Data may be exported to other software packages such as Microsoft Excel for further analysis and for preparation of tables and graphs.

For more qualitative information, gathered, for example, from focus group discussions and key informant interviews, data analysis is based primarily on Glaser and Strauss’s Grounded Theory Method. This method of analysis draws out a list of categories within and across the research question items and various sections of the survey instrument to identify key themes, separately for the focus group discussions and key informant interviews. The results are then imported into nVivo, qualitative data analysis software. A hierarchical coding scheme is developed, based on the initial list of categories, to reflect the key research questions, and shape further by themes that emerge from the data. The data are then coded according to the themes identified. For the focus group discussions, to disaggregate findings by gender, age and location, the data are also coded using ‘case’ codes, with a separate ‘node’ created for each of the interviews. A range of advanced coding queries is used to analyse patterns, trends and responses to various questions in the survey. The results of the queries are exported into MS Word and analysed to write those parts of the report that summarise the findings and identify patterns and trends in the data.

The final analysis will need to reflect the original aims and objectives of the survey. To help structure the analysis, research questions can be developed, such as:

- How important is access to forest resources for the livelihoods of communities?
- Are the poorest communities more or less dependent on forest resources than other groups?
- How do access to forest resources and the resulting livelihood implications vary across the survey sample, e.g., a district?
- How do land ownership, tenure and user rights affect the livelihoods of communities?
Step 2 – Using the results

The use of the results from the survey will again depend upon the objectives. For collaborative land use planning, the results will be used not only as baseline data but also to highlight the issues – constraints and opportunities – that communities encounter with regard to land use and the potential mechanisms for addressing these issues. Robust baseline data can be combined with biophysical data to provide a thorough overview of the situation within the study area (e.g. district). Understanding the communities and their internal and external (e.g. government bodies) relationships will provide a good foundation for developing processes for engaging communities in collaborative land use decision-making processes.

Experiences from CoLUPSIA are described in more detail in Supporting Note 9.


**Websites**

Badan Pusat Statistik (BPS) (Indonesia's Central Statistics Agency): http://www.bps.go.id

CoLUPSIA: http://www.colupsia.org/
Socio-economic survey tools provide a means of improving understanding of local resource management systems, resource use and the relative importance of resources for households and villages. They can also be used to elicit insights on interaction with government decision-making systems, community perceptions of trends and priority issues, and community-based institutions and their role in the sustainable use and conservation of natural resources. Use of such tools is an important first step in engaging local communities and ensuring that local voices are heard and that the community relationship with resources, land rights and access are incorporated into collaborative land use planning processes.

Collaborative land use planning involves working with all stakeholders – government, communities, the private sector and others – to ensure that land is used sustainably and that environmental degradation and forest loss are avoided, while accounting for the social and economic implications for all users. With respect to communities, collaborative land use planning aims:

To ensure that land use planning decisions are made with consideration of local communities’ opinions, land use needs and socio-economic conditions, including rights of access to and use of land.

The aim of this guide (and the Supporting Notes) is to provide practical steps (survey design, sampling and data requirements; planning and training, conducting the survey) for field-based practitioners to conduct socio-economic surveys of households and villages, including focus groups and key informant interviews. The information obtained can be used directly in the collaborative land use planning process, helping to facilitate or reinforce a consensus on land tenure and rights, now and in the future.