

#### National Forest Monitoring System Training Modules



# **Forest Inventories**

Module 5: Data Collection through interviews

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# 1. Introduction

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Policy actors demand answers to questions related to forestry and food security, changes in forest-use patterns and deforestation attributed to policy interventions. Governments have limited information about the effects of their changes in public policy, regarding forestry and rural development.



Policy-makers need monitoring programmes that assess characteristics of resource users (and their use of resources).



These cannot rely only on conventional forest inventories (quantitative estimates).

Interviews (providing qualitative information) are also of great help.





Social units and forest types are not distributed equally...



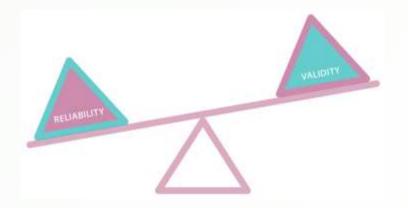


Individuals involved in forest inventories typically have not received training on conducting personal interviews

Information gathered about forest use and forest users should be both valid and reliable.

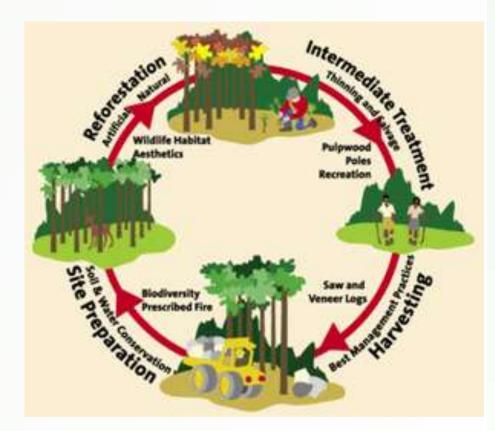
Field interviews can increase the policy relevance of inventory results.





They can include information about the human use of forests and the human factors affecting forest conditions.

Key for monitoring forest governance performance (and human drivers of forest change), the effectiveness of policy objectives and the efficacy of policy interventions.





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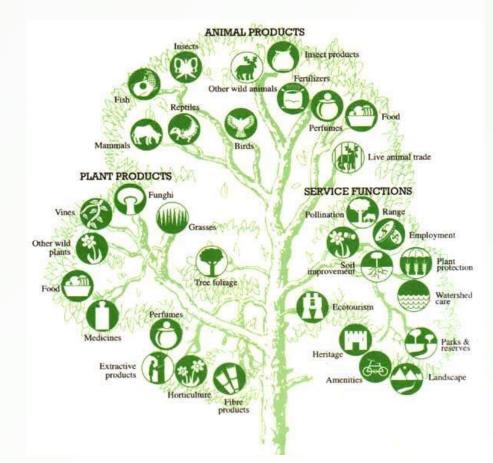
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#### 2. SOME PRACTICAL EXAMPLES WHEN FIELD INTERVIEWS HAVE BEEN USEFUL FOR THE COLLECTION OF RELEVANT DATA

# In the context of GHGI, some information can be obtained through socio-economic survey

Interviews with individuals, representing various perspectives on GHG inventorying for Small-to-medium-size companies (SMEs), were used as input for a brochure and a database to facilitate SMEs' ability to conduct GHG inventories (Grandoni et al, 2014).

Collection of data on livelihoods and agricultural practices, in the framework of the Mitigation of Climate Change In Agriculture (MICCA), have taken place in Kenya. Knowledge about impacts of climate change is gained and surveys can be used as a tool for the assessment of greenhouse gases (Zagst, 2012)



#### Social management of natural resources

In Gambia, interviews and Participatory Learning elements served in the assessment of Market Analysis and Development (MA&D) impacts in rural communities, and the capacities of Community Forest Committees (CFCs) in forest management (FAO, 2011).

Kessy et al (2010) provide fieldwork instructions for socioeconomic data collection in the framework of the National Forestry Resources Monitoring and Assessment (NAFORMA) Programme in Tanzania.

#### Identification of drivers of deforestation

Community level consultations and stakeholder interviews have been useful for understanding the drivers of deforestation in Zambia and assess the current impact of consumption, production and development on deforestation (Vynia et al, 2012).

Qualitative information from stakeholders, at the sites of deforestation (e.g. through key informant interviews, focussed group discussions, participatory rural appraisal sessions and livelihood analyses), is important for FAO to understand the dynamics of the drivers of deforestation<sup>1</sup>.

1: http://unfccc.int/resource/docs/2012/smsn/igo/70.pdf

#### Land tenure

Participatory observation, self-administered interviews and questionnaire survey have been used to collect information and explore the impacts of land tenure change on forest covers in Pakistan (Rahman et al, 2014)

Multi-stakeholder consultation processes have been fundamental for the assessment of issues and actions included in the Voluntary Guidelines of FAO on the Responsible Governance of Tenure of Land, Fisheries and Forests (FAO, 2012).

#### 3. FOUR KEY QUESTIONS ARE TO BE ADDRESSED IN ORDER TO GUARANTEE THE QUALITY OF DATA FROM INTERVIEWS:



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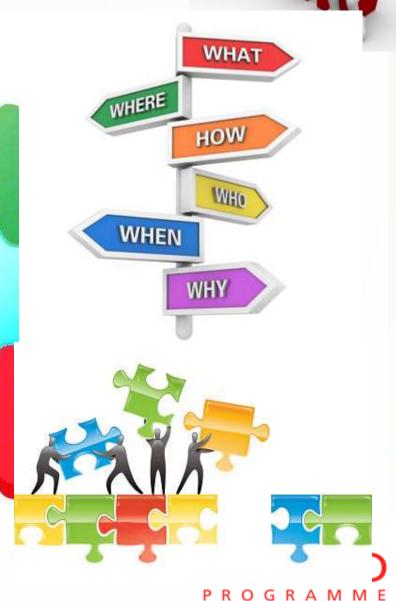
#### 3.1 What questions should be asked?

A needs assessment during the planning help decide what variables should be measured.

These are series of meetings with stakeholders, where they express their opinions and suggestions regarding the conduction of field interviews.

Requirements

It helps clarify and prioritize gaps and information regarding forestry planning and decisionmaking.



#### 3.1 What questions should be asked?

The needs assessment help clarify some issues, such as:

- "Hot topics" related to forest use and forest users that could light on
- Current knowledge gaps that may prevent national forest policy from increasing its cost-effectiveness
- Analytical products that stakeholders may find most useful



An agreement among stakeholders, concerning the desired outputs of the NFA, is the basis for the definition of the population of interest.

People near forests are of great importance. They depend directly on forests for their livelihoods, and constitute a very vulnerable group.



Possible definitions of populations of interest may include:

(i) the entire nation's population at large;





- (i) the entire nation's population at large;
- (ii) forestry firms;
- (iii) forest owners;





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- (ii) forestry firms;
- (iii) forest owners;
- (iv) associations of forest users;
- (v) communities participating in community forestry activities;





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- (vi) the primary agents of deforestation;
- (vii) indigenous people, and many others.





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#### 3.3 What to measure?

Interview Control Information	<b>Identificat</b>	ion and location of	Household characteristics
When the interview was conducted and by whom, who entered the data and who checked and approved the data	Coordinates outside SU, Adu to nearest fore Sample un	<b>household</b> s, whether household is ministrative unit, distance est, horizontal distance to hit centre, duration of interview.	Which member of the household was interviewed, how many members the household has, etc
Household assets	Household food security and		Household income
Household assets Which materials were used to build the home, what modes of transportation and communication does the household have access to, etc? Sources of energy are used, and if alternatives are available why are these not used? Mkich sources of energy are used, and if alternatives are available why are these not used? Are there any local organizations that ar forest governance? Are the household involved in this work?	<u>risks</u> Sources of food for household, experienced food shortages and which roles do forest products play for household food security?		Which are the main sources of cash and non-cash income?
Sources of energy	Forest products and services		Participation in organizations
Which sources of energy are used, and if alternatives are available why are these not used?	Which are the main products and services used by the household, and which are the main characteristics associated with their use?		and forest user groups Is the household involved in formal/informal groups that seek to improve forest use
<b>Relationship with forestry-related</b>		Fore	ost Govornanco
Relationship with forestry-	relateu	1016	est Governance
Relationship with forestry- organizations Are there any local organizations that ar forest governance? Are the household involved in this work?	re engaged in	To what extent are g	overnance organizations effective in naging the forest?

• Building rapport. Involve stakeholders





- Building rapport.
- Taking notes.





- Building rapport. Involve stakeholders
- Taking notes.
- To be sensitive to the constraints facing women.







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- To be sensitive to the constraints facing women.
- Use an open-ended questioning style.



- Building rapport. Involve stakeholders
- Taking notes.
- To be sensitive to the constraints facing women.
- Use an open-ended questioning style.
- Transect walks.

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- Building rapport. Involve stakeholders
- Taking notes.



- To be sensitive to the constraints facing women.
- Use an open-ended questioning style.
- Transect walks.
- Structured/Semi-structured interviews.



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acing women.

- Building rapport.
- Taking notes.
- To be sensitive to
- Use an open-ende
- Transect walks.
- Structured/Semi-st

- Probing and the use of non-leading "helper questions".
- Giving interviewees a chance to ask questions.
- Maps or aerial photographs may stimulate discussion about local forest use
- Community mapping.
- Direct observation.



#### 3.5 What is the best way to verify data quality?

# 1. Test of representativeness during the data collection phase

This may help assess whether the complexities of the country's forest use are being captured by the measurements in the sampled sites.

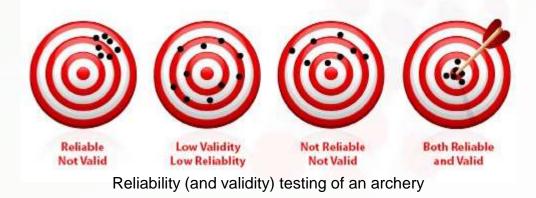


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## 3.5 What is the best way to verify data quality

#### 2. Reliability tests

The degree to which measurements are repeatable and consistent. Formal ways of testing involve examining stability (whether a measurement is repeatable) and equivalence (whether a measurement is consistent).



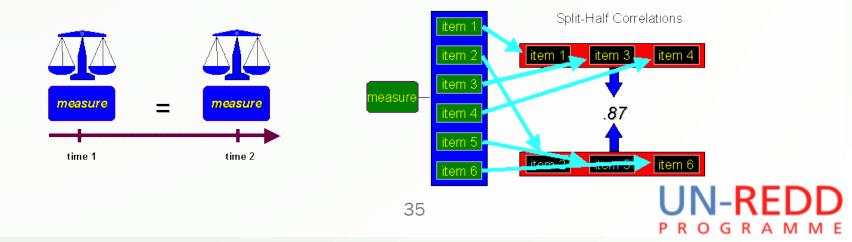
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#### 2. Reliability tests

In terms of stability, a measure is reliable if its test-retest correlation score is greater than r=0.70.

For Equivalence. A test can be split, e.g. by odd and even numbers (The Split-half Method). When the two halves provide similar results, the test has internal reliability.



# quality?

### 3.5 What is the best way to verify data quality?

#### 3. Validity tests

An independent team of experts can compare the NFA survey results with their own in-depth measurements.

Measurements at a selected number of sites help obtain an idea of the validity of the original measurements.

The validity of the interviews may be further strengthened by a survey pre-test.

#### 4. Conclusions

The quality of a study is related to the questions the NFA team asks, who they ask, how they ask their questions and how they go about verifying the information obtained.

The credibility of the NFA results hinges on how the NFA team presents its estimate of uncertainty.

Without a good description of the degree of uncertainty, a particular finding is difficult to interpret.

#### 4. Conclusions

It is important to estimate explicitly the bounds of uncertainty for the conclusions drawn from the results.

The degree of uncertainty can be estimated by considering how observed limitations in reliability and validity might influence the study's findings.

Presenting the study's limitations up-front and in a systematic fashion, strengthens the scientific merit of the results and increases the credibility of the study.

#### References

FAO. 2011. Socio-Economic Evaluation of Community-Based Forest Enterprise Development using the Market Analysis and Development Approach in Community Forestry in the Gambia, by K.Camara. Forestry Policy and Institutions Working Paper No. 27. Rome.

Grandoni, M., Pakatar, N., Renganathan, S. & Vergara, S. 2014. Connecting SMEs to GHG Inventory Resources.Available at: <u>https://www.wpi.edu/Pubs/E-project/Available/E-project-050614-204056/unrestricted/Connecting\_SMEs\_to\_GHG\_Inventory\_Resources\_-</u> <u>CNPL\_2014.pdf</u>.

Kessy, J., Anderson, K. & Dalsgaard, S. National forestry resources. Monitoring and assessment of Tanzania (NAFORMA). Field Manual: Socioeconomic survey. NAFORMA document M05-2010. Available at: <u>http://www.fao.org/forestry/23485-</u>0c45f59c134a7d94ee53613174fab93bb.pdf.

Rahman, F., Haq, F., Tabassum, I., & Ullah, I. (2014). Socio-economic drivers of deforestation in Roghani Valley, Hindu-Raj Mountains, Northern Pakistan. Journal of Mountain Science, 11(1), 167-179.

Seufert, P. (2013). The FAO voluntary guidelines on the responsible governance of tenure of land, fisheries and forests. Globalizations, 10(1), 181-186.

Vinya, R., Syampungani, S., Kasumu, E.C., Monde, C. & Kasubika, R. (2011). Preliminary Study on the Drivers of Deforestation and Potential for REDD+ in Zambia. A consultancy report prepared for Forestry Department and FAO under the national UN-REDD+ Programme Ministry of Lands & Natural Resources. Lusaka, Zambia.

Zagst, L. 2012. Socio-economic Survey EADD-MICCA Pilot Project in Kenya. Mitigation of Climate Change in Agriculture (MICCA) Programme Background Report 4. Food and Agriculture Organization. Available at: <u>http://www.fao.org/climatechange/32989-03e9a6693df0c024fe193dd15e7d6b710.pdf</u>.