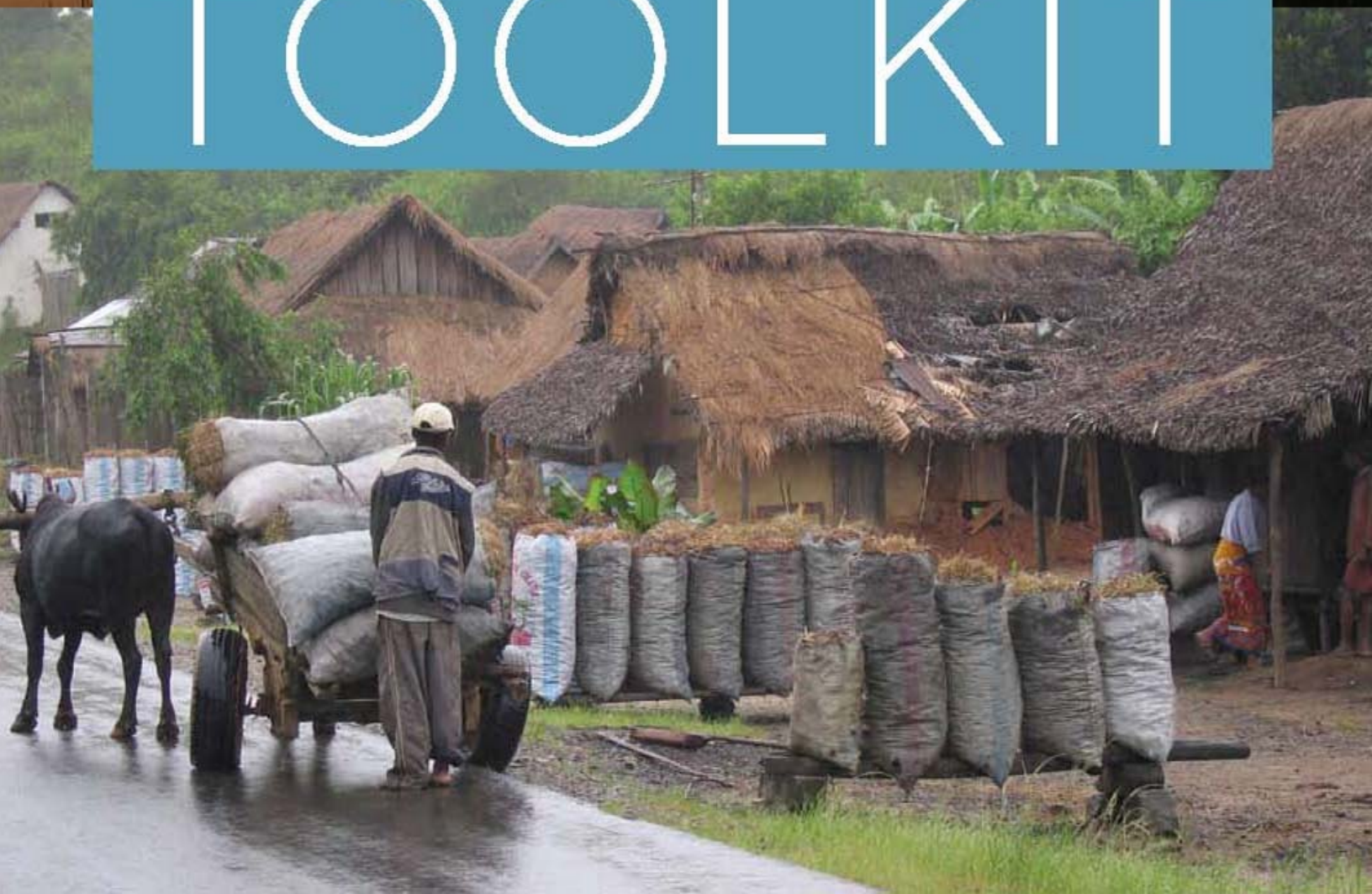
PROFOR
PROGRAM ON FORESTS

POVERTY-FORESTS LINKAGES TOOLKIT



PROFOR
PROGRAM ON FORESTS

PROFOR IS A MULTI-DONOR PARTNERSHIP FORMED TO PURSUE A SHARED GOAL OF ENHANCING FORESTS' CONTRIBUTION TO POVERTY REDUCTION, SUSTAINABLE DEVELOPMENT AND PROTECTION OF ENVIRONMENTAL SERVICES. BY FINANCING ACTIVITIES TO IMPROVE KNOWLEDGE AND APPROACHES FOR SUSTAINABLE FOREST MANAGEMENT (SFM), PROFOR SEEKS TO ENCOURAGE THE TRANSITION TO A MORE SOCIALLY AND ENVIRONMENTALLY SUSTAINABLE FOREST SECTOR SUPPORTED BY SOUND POLICIES AND INSTITUTIONS THAT TAKE A HOLISTIC APPROACH TO FOREST CONSERVATION AND MANAGEMENT. TO LEARN MORE, VISIT HTTP://WWW.PROFOR.INFO

POVERTY-FORESTS LINKAGES

TOOLKIT

OVERVIEW AND NATIONAL LEVEL ENGAGEMENT

THE TWO PARTS OF THE PROFOR POVERTY-FORESTS LINKAGES TOOLKIT

The toolkit provides a framework, fieldwork methods and analytic tools to understand and communicate the contribution of forests to the incomes of rural households. It is presented in two parts.

PART 1

THE NATIONAL LEVEL

Purpose: Part 1 discusses and guides the networking and research that is needed at national level to understand and communicate the contribution of forest products to rural livelihoods.

Users: Part 1 is intended for the researchers, government officials, staff of national or international NGOs, or consultants who are involved in taking responsibility for the use of the Poverty-Forests Linkages Toolkit at national and local levels. Part 1 also provides the necessary foundation for building relationships and buy-in from decision makers in the audiences described above.

Content: Part 1 provides information on the overall use of the toolkit, an overview of Poverty Reduction Strategies and national forest programs, advice on how to link with key policy makers and officials, and guidance on how to make sure the toolkit fits appropriately into both the country's general poverty reduction process and into the forest sector's commitments and interests. It also suggests means of communicating the findings of Part 2 effectively at district and national levels.

PART 2

THE FIELD MANUAL

Purpose: Part 2 gives detailed guidance on carrying out fieldwork at village-level to assess the contribution of forest products to rural livelihoods.

Users: Part 2 is aimed at the groups gathering data in the field - NGOs, CSOs and local-level officials. It is adapted to local capacity and assumes that members of this audience will need initial training in the use of the toolkit in the field, but that they would be able to manage the process alone on a subsequent occasion.

Content: Part 2 gives suggestions for site selection, pre-field planning and organization of the field visits. It goes on to describe the field tools, with instructions for their use, providing all the charts needed together with examples illustrating the data they generate. There are full explanations of the purpose of each tool, the materials needed for each, and problems to look out for. The language and explanations have been made as simple and clear as possible.

Part 2 is designed so that it can be used as a free-standing manual for use in the field.

POVERTY-FORESTS LINKAGES
TOOLKIT

OVERVIEW AND NATIONAL LEVEL ENGAGEMENT

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PREFACE AND ACKNOWLEDGMENTS

Over the past few years there has been a growing interest in the role that forests play in supporting the poor, in reducing their vulnerability to economic and environmental shocks, and in reducing poverty itself. International workshops in Italy, Scotland, Finland and Germany have focused on the contribution of forests to livelihoods and the policies needed to strengthen that contribution. More recently, in late 2006, FAO, ITTO and other partners held a major conference on the subject in Vietnam. However, this debate has remained largely among forestry professionals, and the case for the contribution that forests make toward poverty reduction is yet to be convincingly made to policy makers concerned with poverty in key Ministries such as Ministries of Finance, Planning or Local Government, or in the supra-ministerial bodies where Poverty Reduction Strategy (PRS) processes are often located. The role of forests in poverty reduction has not so far been reflected in any significant way in national level strategy.

At the same time, Forestry Ministries, though they are now beginning to feel challenged to demonstrate the ways in which forests contribute to poverty reduction, are for the most part moving only slowly to collect new kinds of data to meet this challenge. Their previous experience of data collection has not prepared them for this.

In May 2004, IUCN, ODI, CIFOR, PROFOR and Winrock International formed a working group partnership to consolidate and build upon the growing knowledge base from field work and research efforts on the different ways in which forests benefit the poor. The objective of the partnership was four-fold: first, to devise a rapid methodology for appraising forest-livelihood linkages from field exercises; second, to undertake more extended research through a series of case studies in six countries; and third, and most importantly, the objective was to devise ways by which locally gathered data could enrich national level and in due course national level processes such as PRSPs (Poverty Reduction Strategy Processes) and nfps (national forest programs).

Finally, the availability of this data would better equip countries for international country reporting on forests, and for participation in the international dialogue on forests.

This toolkit is the key product from the partnership. It has been tested in Indonesia, Tanzania, Cameroon, Ghana, Madagascar and Uganda, with the help of external agencies.

It is also worth noting that as the toolkit methodology is directed at strengthening the 'voice of the poor' in national policy debates it has relevance to other policy processes beyond poverty reduction. One example would be the emerging attention being given to the role of forests in national climate change policy. The need to inform and enrich policy development with the experiences of the rural poor is as much needed to secure

1 "The Role of Forestry in Poverty Alleviation" Cortevecchia, Italy, September 2001; "Forests and Poverty Reduction: How can development, research and training agencies help" Edinburgh, U.K., June 2002; "Forests in Poverty Reduction Strategies: Capturing the Potential" Tuusula, Finland, October 2002; "Rural Livelihoods, Forests and Biodiversity" Bonn, Germany, May 2003. International Conference on 'Managing Forests for Poverty Reduction' Ho Chi Minh City, Vietnam October 2006. FAO, ITTO, TFT, RECOFTC, WWF, SNV, Asia-Pacific Forestry Commission.

sustainable policy positions around climate change as it is for wealth generation and poverty reduction. The focus in this document on Poverty Reduction Strategy Papers could therefore be replaced by other statements of national policy.

In the development of methodology for the appraisal of forest-livelihood linkages in the six extended country case studies, we would like to recognize the contributions of the following people: from Winrock International in Guinea—Chris Kopp and Boubacar Thiam; Nepal—Erin Hughes and Shyam Upadhyaya, Tanzania—Devona Bell; from CIFOR in India—Deep Pandey and Brian Belcher; from ODI in Indonesia—Gill Shepherd, Adrian Wells, and Martin Kayoi; from IUCN in Lao PDR—Andrew W. Ingles, Sounthone Kethpanh, Andy, S. Inglis, and Khamphay Manivong; and R.J. Fisher and Ed Barrow.

Special thanks go to Gill Shepherd (ODI/IUCN) for first developing the Toolkit as a way of gathering data on the overall links between poverty reduction, livelihoods and forests. She led its initial testing in Papua, Indonesia for DFID with Adrian Wells and the Provincial Forestry Department (in highland, lowland and mangrove sites) in 2004, the findings being used by the Provincial Chief to make policy arguments at national level. Following redrafting, she re-tested both parts in Tanzania for PROFOR with Devona Bell (Winrock) in 2006. She again revised both parts of the Toolkit after the completion of the test, and this version was circulated for extensive in-house review within the World Bank. A final revision incorporating comments and suggestions from reviewers was completed in late 2006. The text was then ready for external reviewers.

We thank Carolyn Peach Brown for her critical review of the draft chapters, and our dedicated colleagues at the World Bank, Jill Blockhus, Laura Ivers, Grant Milne, and Moeko Saito, for their support, inspiration and contribution.

After the case studies were completed, a multi-country team evaluated and developed the toolkit further in four countries: Cameroon, Ghana, Madagascar and Uganda between February 2007 and July 2008. This development phase of the toolkit was managed by Sonja Vermeulen of IIED, Des Mahony and Sarah French of the Centre for International Development and Training (CIDT) and Neil Bird of ODI. The team leaders in the four countries, who led the testing and evaluation activities, were: Cornelius Kazoora of the Sustainable Development Centre, Uganda, Rakotomamonjy Rasamoelina of FONIALA, Madagascar, Elijah Danso of Environment and Development in Ghana, and Camille Jepang from the IUCN regional office in Cameroon.

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SECTION ONE

AN OVERVIEW OF THE POVERTY-FORESTS LINKAGES TOOLKIT

INTRODUCTION

There are two main reasons why the role of forests in poverty reduction has not so far been reflected in any significant way in either national level Poverty Reduction Strategy (PRS) processes or in national forest programs (nfps).

First, most countries have little data available to illustrate how forests contribute to the livelihoods of poor households. Second, the data that does exist rarely gets presented in ways that are meaningful to those designing PRSPs and nfps. On the poverty side, there is a tendency to underestimate the contribution of forests, and off-farm natural resources in general, to livelihoods. On the forestry side, reporting is typically in terms of the physical resource (trees planted, forest cover improved, timber sold) rather than livelihoods, with the sole exception of recording the number of people formally employed in the forest sector. Such reporting sheds no light on the contributions made by forests to the lives of the poor.

POVERTY REDUCTION AND THE POTENTIAL CONTRIBUTION OF FORESTS

Ways of conceiving and measuring poverty have evolved over time, as the chart below shows, from the use of a purely dollar-based approach to attempts to capture the voices of the poor themselves in their experience of poverty.

Poverty has often been defined as having insufficient material (income, food), or other resources (health, education) to maintain an adequate standard of living. More recently it has been broadened to recognize the

THE EVOLUTION OF THE POVERTY CONCEPT		Can the contribution of forests be identified this way?
From clear-cut objective measures	**1945-1960s** Monetary income/consumption National income stats + household income surveys	Yes
↓	**1970s-1980s** Basic needs and poverty alleviation. Nutrition, food security, health, education	Yes
to 'softer' measures which reflect non-income aspects of poverty, and the views of the poor.	**1990s** Non-monetary income/consumption More effort to ensure that goods not entering the marketplace are also taken account of in assessing poverty.	Yes
↓	**1990s-2000** Empowerment, security, control of resources. Poverty reduction may come in part through better governance, and devolution. Resource control gives greater security, reduces vulnerability.	Yes if resources are allocated in a pro-poor way.
But these decrease formal measurability, and comparability.	**2001** Poverty is seen (by Amartya Sen) as 'capability deprivation'. Poverty reduction is, in part, access to more freedom of choice.	Unclear what this means for forests.

Parts of this table are drawn from data in Arild Angelsen and Sven Wunder 2003, 'Exploring the Forest-Poverty Link: key concepts, issues and research implications'. CIFOR Occasional Paper no 40.

importance to the poor of assets (natural, physical, financial, human, and social) with which to generate or sustain an adequate livelihood, and of the empowering arrangements that allow them, if they are in place, to convert those assets to livelihood improvements.

Research in recent years has shown that the poor are more vulnerable, more exposed to risk, and have to make a living from more diverse resources than the less poor. It has shown that the poor may not have the power or confidence to express the need for change—or a platform for the purpose. Research to illuminate the situations of the moderately poor (the just-poor) and of the very poor (the chronic poor who inherit and bequeath poverty) has been important. And so has work that illuminates the poverty differences dictated by age, gender, ethnicity, class or caste and other culturally specific variables.

Applying this improved understanding of poverty to the role that forests can play has been pioneered in studies by several of the institutions in the PROFOR Working Group[2]. These studies all suggest that despite the common (but by no means universal) trend in many countries for natural forest cover to decline over time, supplies from forests continue to be very important to rural people. They are valued for a wide range of current consumption needs and for small regular sources of cash. These values increase in times of difficulty such as when rains fail, or when productive members of the household fall ill or die. They are also important in helping to even out seasonal fluctuations in food availability, or for portions of the year when some household members are absent as seasonal migrants. They are especially important in remote areas, further from markets and roads, where income-generation and laboring opportunities are more limited.

Although wealthier rural households within a community may be greater users of forest products by volume, poorer households often depend on the forest for a larger proportion of their overall livelihoods. They supplement returns from their more limited land, wealth in animals, and pool of labor with forest income, and while the *amount* of income obtained from forest products may be small, as a proportion of overall annual cash and non-cash income, it is often significant. Forest product-gathering activities can be particularly important to women because many activities can be combined with household tasks, require no capital start-up costs, and generate cash which women can allocate to ends not prioritized by their husbands.

Finally, and least well understood, is the role that forests play in reducing long-term poverty and in helping people to escape from poverty. Some researchers have investigated this topic in a rather narrow way, and if they cannot find forest products which directly and in short order lift their gatherers out of poverty, assume that forests have little role to play in real poverty reduction. In many cases, timber sales constitute the only item taken into consideration. We suggest that forests help to move the chronically poor to the occasionally poor, and the poor to the less poor, but over more than one generation. We have seen how women use forest NTFPs to generate cash for school fees and school uniforms for their primary school children; and how fathers sell timber, or cattle (fed on forest browse) to send those children on to secondary school. The forest also has a role in helping part-families survive tough times at home while key household members build a bridgehead as labor migrants to urban opportunity, or to more money to invest in the farm. These examples show how strategies for escaping poverty are often constructed at a household, rather than an individual level.

A recent meta-analysis of fifty-four primary studies of rural livelihoods in and near forests[3] broadly suggests, while it was not a statistically representative sample, that

2 Recommendations for further reading on forests and poverty can be found in Annex 2.
3 Vedeld et al, 2004. 'Counting on the Environment'. World Bank ENV Paper no 98.

forest income represents approximately 20% of total annual cash and non-cash income of households in such places. It further suggests that about half of this forest income appears as cash, and that forest incomes have a strong equalizing effect.

The role of forests in poverty reduction requires some definition of what is counted as a forest-based contribution to livelihoods. Following CIFOR's PEN (Poverty Environment Network) guidelines,[4] we define forest products as anything collected from a forest, or from trees. These include timber and non-timber forest products, whether tree, plant or animal-based.

Some stakeholders still live in heavily forested landscapes, while many others live in predominantly agricultural or rangeland landscapes with fewer trees. Since such trees nevertheless remain important, we have accepted a wide definition of 'forest' for the purpose of this exercise.

Finally, we have limited our consideration to stakeholders[5] directly reliant on forest contributions to their incomes of one sort or another—people who live near to forests, and for the most part gather the forest products they need, rather than buying them.

This poses the question of how many such people are there in the developing world? Estimates vary widely, but there are certainly many hundreds of millions of them. Various people have tried to make informed estimates. O J Lynch and K Talbott (1995) suggest 500-600 million in the Asia and Pacific region. David Kaimowitz (2003) estimated 'hundreds of millions' just in Africa. Neil Byron and Michael Arnold (1997) cite a range of possible figures, up to a billion, a figure that does not look too high in the light of the other two.[6]

WHAT IS THE PROBLEM TO WHICH THE TOOLKIT IS THE SOLUTION?

The adoption of the Millennium Development Goals, including the International Development Target of halving global poverty by the year 2015, has impacted on national development strategies and the funding priorities of multilateral and bilateral agencies. Poverty reduction as the *primary* objective of development has required that all sectors, including forestry, are able to articulate their contribution to poverty reduction.

Poverty Reduction Strategies Papers (PRSPs)[7] have become the main mechanism for governments in many least developed countries to define their budget and policy priorities, and to gain access to concessional IDA (International Development Association) loans to help meet these priorities.

In the initial PRSPs and interim-PRSPs, although simple mention of forests was made in 30 out of 36 assessed by the World Bank researcher Jan Bojö,[8] there was almost no analysis of the contribution of forests to rural livelihoods, nor of the measures required to capture or expand their potential. Very few, if any, links were made between PRSPs and country nfps (national forest programs). While full PRSPs were on the whole better than earlier versions in mentioning the importance of forests, methods for capturing this information remained unelaborated.

4 See http://www.cifor.cgiar.org/pen/_ref/pubs/index.htm

5 There are also off-site, more indirect, forest stakeholders such as urban consumers of forest products, urban-based timber producers, forest product middle-men and downstream beneficiaries of forest services such as water, but this particular toolkit does not address them.

6 O J Lynch and K Talbott in 'Balancing Acts: community-based forest management and National Law in Asia and the Pacific' WRI Washington (1995). David Kaimowitz, (2003),' Not by bread alone…' (http:// www.efi.fi/publications/proceedings/47)). Neil Byron and Michael Arnold, (1997) 'What futures for the people of the tropical forests?' CIFOR Working Paper, no 19, Bogor, Indonesia.

7 PRSPs are explained fully in Section 2.

8 Jan Bojö, Environment Department, World Bank 'Poverty Reduction, Forests and Livelihoods'. In-house presentation made 27-2-2006. Bojö et al, 2004, 'Environment in PRSPs and PRSCs'. World Bank ENV paper no. 102

If PRSPs fail to incorporate data from the forest sector, national efforts to reduce poverty and vulnerability will undercount the critical role that forest resources currently play—and the potentially greater role they could play—in the livelihoods of the poor. Similarly, forest ministries and national forest programs are not collecting forest data in such a way that sheds light on the contribution forests make to poverty reduction. As we suggest, a limitation has been a lack of information on the contribution of forests to poverty reduction, or rather no good mechanism for moving from interesting research findings to data inclusion, which can lead to action. The primary objective of the toolkit, then, is to facilitate this inclusion.

The toolkit offers simple methods for capturing data concerning the role of forests and trees in poverty reduction, including both indications of the direct cash contributions to poverty reduction that the forest may make, but also the wide range of non-cash income that poor people derive from the forest.

WHO ARE THE TARGET AUDIENCES FOR RESULTS GENERATED BY THE TOOLKIT?

The toolkit is intended to generate information primarily for audiences to be found at two national government levels:

Bodies concerned directly with poverty reduction

- The Central Coordinating Unit (and its Steering Committee) responsible for developing the country's Poverty Reduction Strategy, and for developing and harmonizing the sectoral indicators by which the strategy will be monitored. This body may sometimes be found in a Ministry of Finance or Planning, but is often in an overarching location such as in the Office of the President or Vice-President.
- Data collection bodies responsible for contributing to the PRS, such as the National Institute of Statistics and perhaps others.
- Inter-agency committees and working groups whose members work together to develop poverty cooperation or to define indicators. Donors are likely to be represented here and possibly NGOs or other civil society representatives.

The Ministry responsible for gathering forest data and referring it on:

- To the PRS Coordinating unit (against clear-cut sectoral poverty indicators agreed with the Coordinating unit).
- To the national forest program if there is one.[9]

These are the primary audiences for which the toolkit was conceived. How these bodies are engaged, encouraged to consider the role of forests in poverty reduction more actively, and how they might move to incorporate such a consideration into the monitoring being developed and applied, is discussed in the next section.

OTHER AUDIENCES

There are also other potential audiences who are both user and audience. While the toolkit was originally conceived simply as a means of making key national level institutions more aware of the key role that forests play for the poor, it is already clear that its field component has a wider set of potential users, including local NGOs and CBOs, national-level NGOs and international agencies—such as IUCN and FAO, which have already used the toolkit.

WHO ARE THE USERS OF THE TOOLKIT?

The toolkit was originally conceived as a means for enabling its *users* to gather data with which to make a

9 See next section.

case to the toolkit's *audience* for the importance of forests to poverty reduction. The toolkit shows users how to gather and analyze this information on the ground, as well as how to use findings to present data on forests and the poor to key decision makers and planners. Collaboration between the two clusters of users and audiences is needed to maximize the impact and benefits for stakeholders with different goals at different levels (local and national).

The first group of users

If new data from the field is to be delivered successfully to appropriate national level audiences (those responsible for updating/revising PRSPs, monitoring attainment of the MDGs, or planning nfps) in useful formats, skilful national-level toolkit 'users' are required. They should be individuals or institutions familiar with national level poverty processes and with natural resource ministries and they should also have, or build, a link with the lead organizers of the field activities.

In the national capital, toolkit users have two tasks:

Planning the analysis (recommended to be undertaken *before* the collection of field data) by:

- Becoming familiar with the country's evolution in their PRSP process, the kinds of poverty data currently being collected, the interest expressed in incorporating forest data into poverty reduction strategies, and where new data on the contributions of forests to the livelihoods of the poor might fit into data gathering systems. (These might include household rural or living standard surveys, sectoral annual data collection from the local to the national level, for example.)
- Making contact with the main government institution hosting the PRS process, as well as with relevant natural resources ministries, key donors, and other important players (civil society groups, NGOs, etc.).
- Working with the national level audiences identified before any toolkit field data is collected, in order to gain their interest and involvement in the purposes for which the field process is being undertaken.
- Keeping these bodies informed about progress while field exercises are going on.

Preparing and *presenting data for different audiences after it has been collected*, by:

- Taking responsibility for turning field analyses into materials useful to particular national-level audiences, and presenting the results. This information is best presented in a user-friendly form (such as diagrams and charts) which represent what is occurring at the local level, and which highlight essential livelihood information and critical factors such as access/tenure, markets, and policy challenges.
- Deciding whether, given the status of the country's data collection systems, the priority is to prepare data to: (i) use insights gained from the toolkit analysis to modify existing sectoral monitoring processes, which in turn feed into PRS monitoring systems; (ii) use the data in a fairly freestanding way to make a more general case for a re-examination of the importance of forests in livelihoods, or (iii) both.

Where national level change is the goal, this group of users will have overall control of both local and national level processes, and will take final responsibility for delivering the product.

The second group of users

The field component of the toolkit is designed to be simple enough to be used easily and relatively quickly by NGOs or CSOs, in collaboration with local forestry personnel and local government staff. The field component enables them to collect information with which to understand forest dependence locally.

It is assumed that these users are not specialists and that some of them at least will never have had any training in participatory assessment tools or surveys. For them, the field tools have been developed to provide a clearly described step-by-step approach. It is recommended that

hands-on training in the use of the tools be provided. These users would then to be able to undertake follow-up tool applications independently, in order to generate further information in the future.

HOW THE POVERTY-FORESTS LINKAGES TOOLKIT CAN BE USED

The impetus for using the toolkit may come from one of two directions:

- *From the national level:* An appreciation of the need for better data on the role of forests and off-farm natural resources (including forests and trees) in livelihoods and poverty reduction may begin at the national level. As the PRSP begins to encompass a broader range of sectors, the ministry responsible for forests, researchers, national or international NGOs involved in poverty reduction processes, or donors in the forest or poverty sectors may identify this need.
- *From the local level:* In some cases, the desire to see the role of forests making more of an impact in national level poverty strategies may begin at the local level as the result of research or project activity.

In either case, analysis and data collection will be needed both nationally and locally. It is only at the national level that effort can be invested in having forests and poverty data taken into account. But it is only through local enquiry that a picture can be built up of the key ways in which forests have an impact on the lives of the poor—positively through livelihood support, and negatively if use of them is formally illegal.

The results generated can be used at both district/field level and at higher levels to underline the contribution of forests to the livelihoods of the poor. They are also sometimes used to highlight ways in which the presence of particular pieces of forest legislation impact negatively on the poor and need revisiting.

Finally, current data collection systems in most countries suggest that making an effort to incorporate forests and poverty considerations into PRSPs is possibly a less challenging prospect than working to include poverty considerations in national forest programs. However, the data generated by the toolkit is a good place to start in considering how national forestry programs need to evolve.

WHAT THE POVERTY-FORESTS LINKAGES TOOLKIT CAN BE USED TO DELIVER

The Poverty-Forests Linkages Toolkit is also intended as a first step in a process which could lead to better data collection by a Forestry Department, so that the real contribution of forests to the nation and its citizens can be better understood.

Like PPAs (Participatory Poverty Assessments), the toolkit delivers local-level "snapshot data" on forest reliance and the livelihood and poverty reduction contribution of forests. This is the first qualitative step in a process intended to make the case of the importance of forests and so lead to the gathering of more quantitative data on the role of forests in the incomes of the poor in the future.

To that extent the toolkit's role is to deliver the following:

- The making of a documented case for the contribution of forests to the cash and non-cash incomes of the poor;
- An assessment of what local people see as the key problems and solutions for forest management;
- Strengthened agency and institutional capacity to identify opportunities and constraints;
- An indication of issues that need to be resolved if poverty reduction is to be effectively addressed by forestry officials;
- And finally, suggestions on how the contributions of forests to poverty reduction could be better captured in a country's own ongoing data gathering systems.

The forest sector has for some time been looking for ways to make a better case for its capacity to support the poor. It is hoped that this toolkit will be used to raise the profile of the role of forests for current consumption, help in hard times, and poverty reduction in the lives of poor people.

It is also hoped that the toolkit may point the way to a more active role for forestry organizations in the future, as contributors of poverty data to national PRS processes, to national forest programs (where they exist) and to compilers of international forest data such as FAO's Forest Resource Assessments.

WHAT THE TOOLKIT CAN DO IS:

- Rapidly assess current dependence on forests
- Provide a vehicle for poor people to comment upon forest laws, policies and programs and their impacts upon local people's livelihoods
- Identify policy problems and opportunities
- Deliver value where there is a willingness to listen to results from key stakeholders, and where there is an ability to implement policy change
- Deliver data on topics impossible to get at quickly through orthodox quantitative methods (but which could subsequently be followed up through quantitative survey methods)
- Complement quantitative data
- Indicate the key forest products and forest-dependent livelihood activities that might merit inclusion in government data collection processes

WHAT THE TOOLKIT CANNOT DO IS:

- Deliver data of the kind collected through slower, more detailed and expensive quantitative survey methods (however the snapshot approach of the toolkit may suggest where more detailed research would be of value)
- Systematically monitor progress towards poverty reduction over time
- Change political hearts and minds where there is absolutely no interest in a focus on the poor in and near forests and the contribution of forests to their livelihoods
- Provide suggestions of actual indicators that could be included in regular data collection by government agencies
- Indicate the potential of forestry to reduce poverty (the toolkit measures current forestry dependence only)
- Assess the role of forests in providing environmental services at the local and national levels (the toolkit considers forest products only, not services)
- Provide a systematic analysis of how current forest policies help or hinder poor people, or contribute to achievement of poverty reduction strategies or the MDGs

SECTION TWO

NATIONAL LEVEL ENGAGEMENT AND ANALYSIS

INTRODUCTION

The purpose of national level engagement and analysis is to set up a meaningful interaction with the key policy makers who will be the audience for the toolkit results, and to find out whether and how policies for poverty reduction link with forestry policy. This analysis involves understanding whether and how the contribution of forests to poverty reduction is already being mainstreamed into current national level policies, programs and laws, and whether and how poverty issues are taken into account in forest sector processes.

The section begins with a brief explanation of the two relevant policy areas: the Poverty Reduction Strategy Process and the national forest program. It then goes on to provide guidance on how to interview key policy makers and officials at national level, how to develop a better understanding of links between forestry policies and poverty reduction policies, how to build interest in the toolkit and how to make sure the toolkit fits appropriately into both the country's general poverty reduction process and into the forest sector's commitments and interests. The section concludes with a checklist of the information and data that toolkit users should aim, as far as possible, to collect at the national level before fieldwork begins.

THE POVERTY REDUCTION STRATEGY PROCESS

Poverty Reduction Strategy Processes are now a requirement for poor countries if they wish to receive concessionary assistance from the World Bank (through the International Development Association, IDA) and the IMF. The World Bank's Country Assistance Strategies (CAS) for poor countries are now based on their PRSPs, and lending arrangements in the form of Poverty Reduction Support Credits (PRSCs), are harmonized with the timing of the government's PRS-oriented budget cycle.

About seventy poor countries are engaged in PRSP processes, and the PRS has become the standard planning framework for these countries. The process involves a comprehensive and participatory diagnosis of poverty, the prioritization of actions to be taken, and the development of targets, indicators and systems for monitoring and evaluating progress towards them.

A PRSP should ideally be *country-driven* (with good participation by civil society and the private sector); *results-oriented* (focusing on pro-poor outcomes); *comprehensive* (in its recognition of the multi-dimensional nature of poverty); *partnership-oriented* (bringing bilateral, multilateral and non-governmental partners together in joint planning) and *with a long-term perspective* on poverty reduction.

The Poverty Reduction Strategy subsection of the World Bank Poverty website shows how much countries vary in the progress they have made. Some have drafted both their I-PRSP (interim PRSP) and their first full PRSP, and have completed two or three years' subsequent institutional development, monitoring and testing, while others have stalled at an earlier stage or have only just begun the process. Other countries have already created and undertaken a second generation PRSP document (PRSP II) based on lessons learned in the first generation.[10]

10 Based on material in the PRSP section of the World Bank website http://www.worldbank.org/poverty. See Annex 1 for a table showing country-by-country progress in PRSP evolution.

Full PRSPs have varied in quality, content and the degree of participation involved in their preparation, in line with the capacities and political culture of the countries concerned. PRSPs are revised every three to five years, and it is already evident that second generation Strategies are improving on the first generation in various ways. The first generation contributed to a stronger focus on poverty inside government, much greater engagement of civil society in poverty policy, and better alignment among donors at the country level. But many early PRS activities took place at only the highest echelons of government, often in a specially created niche. The new focus on poverty reduction was weakly conveyed to sectoral ministries, and rarely reached local government at all. There was an emphasis on social sectors (health, education) at the expense of productive sectors. Too many donors continued to provide resources outside the national budget process.[11]

Second generation PRSPs are attempting to deal with these weaknesses by developing more comprehensive economy-wide plans. Use of the PRSPs leads to better and more pro-poor expenditure tracking, to a more logical allocation of resources in government annual budget cycles, and eventually to longer term Medium Term Expenditure Frameworks (MTEFs). Most countries are only part of the way towards this, and in some, other reforms must precede the introduction of MTEFs. In this vein, all ministries need to be aware that their programs need to be explicitly linked to poverty reduction in the near future.[12]

Monitoring systems are based in part on general data gathered by national statistics institutions, and in part on sectoral poverty monitoring. In some countries there is strong sectoral monitoring, and the challenge is to unify data flowing from different sectors. In others, sectoral monitoring is weak or non-existent, and PRS systems have to help it into existence. Where countries have decentralized, there are additional difficulties since it has been rare so far for regional or local government representatives to be built into the PRS monitoring structure, and communication between line agencies and the local level can be weak.[13]

THE FOREST SECTOR AND NATIONAL FOREST PROGRAMS

National forest programs (nfps) were one of the outcomes of the inter-governmental forest dialogue that ran from the UNCED conference in Rio in 1992 through the IPF-IFF (*International Panel on Forests—International Forum on Forests*) processes of the 1990s to the formation of the UNFF (*United Nations Forum on Forests*) in October 2000. National forest programs are grounded in earlier attempts to bring donors together to support the forest sector and link it to conservation and sustainable development (like the TFAP, the Tropical Forestry Action Plan, or the Asian Development Bank-supported Master Forestry Plans of the late 1980s and early 1990s). Attempts have been made more recently to implement national forest programs in-country through Sector-Wide Approaches in which donors collaborate and align their support to the forest sector.

The national forest program facility at FAO in Rome came into existence in 2002, and currently has 57 developing country partnership agreements (and four sub-regional organizational partnerships). Of these, 18 are with countries with no PRSP, 33 exist in countries

11 Based on *'Second Generation Poverty Reduction Strategies'*, PRSP Monitoring and Synthesis Project Synthesis Note, ODI, September 2004 (www.prspsynthesis.org)

12 'Medium Term Expenditure Frameworks: from concept to practice. Preliminary lessons from Africa'. Africa Region Working Papers No 28. Feb 2002 http://www.worldbank.org/afr/wps/index.htm

13 This summary is based on experience analysed in 'Beyond the Numbers: understanding the institutions for monitoring poverty reduction strategies', Tara Bedi et al, 2006. World Bank, Washington.

with PRSPs and the rest are in countries with no PRSP (mainly because they are middle or upper middle income countries).[14] But there is a broader involvement with nfps than these figures would suggest. As long ago as 1998, a survey of countries conducted by FAO indicated that 85 non-OECD countries (out of a total of 162) had national forest programs, broadly defined, of some kind or another.[15]

The nfp is country-driven, and should address underlying causes of deforestation, as well as forest degradation and illegality. In addressing these issues, especially in poorer countries, nfps redefine the roles of diverse stakeholders in pursuit of the goals of more sustainable forest management and a more equitable sharing of forest resources.

National forest programs explicitly state that they should be linked to the broader processes of sustainable development, decentralization and poverty reduction. But the processes which led to the establishment of the nfp facility at FAO,[16] and the documents which suggested how the IPF (International Panel on Forests) proposals could be incorporated into national forest programs, predate the development of PRSPs and the MDGs, and are actually strikingly lacking in any real mention of forests and poverty reduction.[17] The nfp facility's *raison d'être* grew

14 See Table 1 in Annex 1.

15 'Status and Progress in the implementation of National Forest Programmes: outcome of a survey by FAO'. FAO Rome, December 1999, mimeo.

16 http://www.fao.org/forestry/nfp-facility

17 See A Practitioner's guide to the Implementation of the IPF Proposals for Action, and especially its 'Practical Tool for the Assessment and Integration of the IPF Proposals for Action into National Forest Programs'. FAO and UNDP 1999 (Second edition)

out of sectoral strengthening, rather than the making of an inter-sectoral case.

At one level, given the need for sectoral poverty monitoring data for the PRSP, this does not pose a problem. However, while some sectors (education or health, for instance) can relatively easily supply appropriate indicators for poverty monitoring to the PRSP monitoring framework, in the case of forestry, much more adaptation of data (or additional data) is needed. The forest data traditionally collected relates almost entirely to the resource itself—to total natural forest area, numbers of trees planted and timber production. It is impossible to demonstrate the contribution of forests and forest products to the annual incomes of poor people with this kind of data. Further, the PRS policy framework challenges the forest sector to start reporting in new or additional ways.[18]

Thus traditional forest sector reporting will have to change or be supplemented in due course, and attempts to do so have already begun in a few countries. There is international demand for new forms of reporting as well. The five-year FAO Forest Resource Assessment process, built up from country-level reporting, has proposed the inclusion of indicators showing forests' contribution to livelihoods in the data gathered by Forest Departments and agencies for the next Forest Resource Assessment (FRA) in 2010. While certain kinds of problems will remain (for instance, there is likely to be under-reporting of forest use and dependence in many countries because such use may be formally illegal), nfps do now need to address poverty issues.

To address this issue, FAO recently conducted a study to determine the extent to which national forest programs are linked to poverty reduction strategies in Africa. Carried out between 2005 and 2007, the study sought to increase understanding of the role that nfps can play in enhancing the contributions of forestry to poverty alleviation and highlight the critical importance of collaboration across sectors to achieve this goal. The study revealed that countries are experiencing problems in establishing closer linkages between the two processes although some are implementing innovative approaches to enhance collaboration. Without exception however, weak capacity was found to be a serious constraint which all participating countries face, albeit to varying degrees. It also identified factors that foster or hinder collaboration and propose ways to raise the profile of forestry in terms of its contributions to poverty alleviation. The study was conducted in ten countries in Africa: detailed reports of findings and conclusions for each country are posted at www.fao.org/forestry/site/livelihoods/en/ under the heading 'workshops'.

From the point of view of the PRSP, there are two choices: to modify the way in which forest data is collected and processed annually within the forest sector, or to seek ways of inserting forest-relevant topics and questions into more general surveys. The first option—modifying data collection—is more sustainable in the long-term. The FAO FRA process and the demands of new kinds of forest data for the PRSP are two key drivers towards modification of forest data collection.

PRELIMINARY NATIONAL LEVEL TASKS FOR TOOLKIT USERS

Introduction

The preliminary tasks for the toolkit users are to become familiar (it is assumed in this manual that they are not) with the current progress of the PRSP in the country and with the current capacities and activities of the forestry

18 This section is based in part on 'National Forest Programmes'. *Key-sheets for Sustainable Livelihoods: Policy, Planning and Implementation no. 17. (www.key-sheets.org)* Published by DFID, ODI and the Netherlands Ministry of Foreign Affairs, Neil Bird and Gill Shepherd, October 2002; and in part on Tapani Oksanen, 'National Forest Programs: introduction and overview' in the European Tropical Forestry Research Network special edition on National Forest Programmes, No 41-42, Autumn 2004.

department. This must be done through interviews and through acquiring and reading relevant documents.

Furthermore, interviews must serve two purposes. On the one hand, facts and processes must be mastered. On the other, interviews and meetings have firstly to serve to build interest in the proposition that the contribution of forests to poverty reduction has been under-estimated, and that the purpose of the toolkit is to make this clear and to provoke action. A constituency has to be built for toolkit-related activities, in short.

In the following sections, the people to be interviewed and the subject matter for interviews are set out first for the poverty and PRSP institutions and then for the forestry institutions. Subsequently, section 2.6 provides a discussion of consensus building steps needed for the toolkit to take place.

Becoming familiar with the country's PRS process

The first thing for national level toolkit users to master is the status of the country's PRS process. This can be gleaned in a preliminary way from the poverty reduction strategies section of the World Bank poverty website (www.worldbank.org/poverty). As Annex 1 shows, countries vary considerably in the degree to which they have advanced their strategy and begun to use it for monitoring poverty reduction.

Toolkit users need to find out:

- In which Ministry (often the Ministry of Finance or Planning, or a supra-ministerial location such as the Office of the President) the PRS central coordinating unit/secretariat is located.
- Who the key staff are in the central coordinating unit, and the composition of the unit's Steering Committee.
- What inter-agency committees and working groups are in place, working together to develop poverty cooperation or define indicators. NGOs, donors and civil society may also be represented on these committees.
- What ideas are the Working Groups focused around? Often countries develop organizing themes, pillars or clusters.[19]
- Which data collection bodies are responsible for compiling primary data, collating data from line ministries, and developing data collection systems and information technology? The lead institution will probably be the Government Bureau of Statistics, but university departments or applied research institutions may also have roles.

Conducting key informant interviews relevant to the PRS

Each country will have a slightly differing range of key poverty and PRSP stakeholders to interview. To some extent it does not matter where interviews begin, so long as they are cross-checked through interviews with other interviewees until toolkit users feel they have an up-to-date understanding of key issues (see below) and copies of all the key relevant documents.

Whom to interview?

Interviewees will be drawn from:

- The secretariat of the Ministry which is home to the PRSP process;
- Possibly, one or more working group chairs;
- The National Bureau of Statistics/Central Statistics Agency and/or any agencies working on information technology development;
- World Bank officials working with the PRS process;
- Bilateral and multilateral donors working on aspects of poverty and the PRSP;

19 Some countries choose a sectoral focus (Zambia); some, aspects of poverty: Growth and Reduction of Poverty; Improvement of Quality of Life and Social Well-Being, Governance and Accountability (Tanzania); Expanding Employment Opportunities, Empowering Communities, Building the Capacity of Poor People, Social Protection (Indonesia).

- Relevant university or independent research institutions linked with some aspect of the PRS process;
- INGOs with strong poverty and development interests such as OXFAM; and
- Local NGOs who may have helped to organize PPAs or other aspects of civil society consultation.

The purpose of interviews conducted is:

(i) To obtain an up-to-date picture of the point the PRS process has reached in its evolution, and of the next steps being taken. Is the PRSP still in a design phase or has it reached implementation? Is implementation already taking place, and if so how far along is it? Joint Staff Assessments and PRSP Annual Progress Reports[20] will be helpful for understanding these points, and for assessing possible entry points for the toolkit.

(ii) To obtain copies of relevant PRSP documents not yet available on the World Bank's website and also of key previous documents such as PPAs or other civil society consultation documents, which might have been produced in the course of generating the I-PRSP or the PRSP itself.

(iii) To understand the PRS monitoring system already in place and plans for its evolution.

(iv) To become familiar with the main data sources used to obtain regular insights into rural livelihoods and incomes, and the frequency with which each type of data is collected (annually, periodically, every 5 or 10 years, etc). These will include censuses, and might include Household Budget Surveys (as in Tanzania) or annual food basket and poverty line calculations (as in Indonesia). Key one-off or occasional surveys should also be identified (such as Indonesia's 2002 National Socio-Economic Survey or its Family Planning Agency survey on household poverty levels by village). Rural agricultural surveys are also important. In the case of Liberia (returning to stability after 15 years of civil war), no poverty data is available and the closest proxy in late 2006 was the World Food Program "Comprehensive food.security and nutrition study."

(v) From Bureau of Statistics documents or staff, to obtain the latest national level per capita income figure, and any provincial or district level per capita income figures that exist, especially for the areas where the toolkit is to be applied.[21]

(vi) To identify new data collection systems currently being devised, perhaps using new forms of information technology. For instance, in Tanzania districts are being linked to the national level by computer, and are being provided with unified PRS reporting formats.

Understanding the forest sector

In the case of the forest sector, toolkit users have a simpler task. Once they know whether Forestry is located in a free-standing Ministry or whether it is a Department within another Ministry such as Agriculture, or the Environment, it is possible to move directly to interviews and to document collection. Again it is important to triangulate information by checking the results of interviews against one another.

It should be expected that forestry data in the past will have been weak on livelihoods and forests. However, a

20 Joint Staff Assessments are documents produced by World Bank staff for reporting on the status of a country's current PRSP to the Boards of the IMF and the World Bank, and for providing feedback to countries about how to improve their strategies. Annual Progress Reports are produced by governments in each year of PRS implementation, and their objectives are to enhance government performance on poverty reduction, meet donor reporting requirements and support enhanced government accountability to citizens. *'PRSP Annual Progress reports and Joint Staff Assessments – a review of progress'* PRSP Monitoring and Synthesis Project, Briefing note 9 ODI, September 2004, (www.prspsynthesis.org)

21 Useful summary data on most developing countries, including poverty rate, income distribution, etc., can be found at www.earthtrends.wri.org/pdf_library/country_profiles.

review of available materials will yield some sense of how much interest the forest sector has shown to date on the relationship between poor people and forests. For instance, the availability of materials on Community Forest Management, Joint Forest Management, Participatory Forest Management and/or on-farm tree-planting programs gives an indication of the extent to which the country has experience or prior interest in people and forests issues. Government studies, INGOs', bilateral and multilateral agencies' experience, relevant publications by local research institutions, and private sector documentation are all important sources among which studies on poverty, livelihoods and forest use should especially be noted.[22] Important documents to locate also include relevant national decrees, laws and policies concerning forest access and use by local people; data on forest products (timber and non-timber), trade and processing, and a sense of all other currently collected data, including forest inventories.

Conducting key informant interviews relevant to the forest sector

Whom to interview?

Although each country will have a slightly differing range of key forest stakeholders who should be interviewed, a generic list would need to include most of the following:

- The Ministry and/or Department responsible for Forests and within that, particularly those responsible for Planning and Policy, Forest Information Management,

22 Many donors are prolific in generating reports on these topics, some of which are highlighted in Annex 2 with suggested readings on forests and poverty.

Community Forestry, Production, Conservation, as appropriate;
- The main forest sector donors and any sectoral development donor working groups (especially in countries where forestry is the subject of a SWAP);
- National NGOs with forest sector or biodiversity conservation interests;
- International NGOs with similar interests, such as IUCN, WWF, CARE, TNC, WCS;
- International or national NGOs or CSOs with an interest in the rights of forest peoples;
- Private sector interests such as associations of foresters, or concessionaires; and
- Academia (e.g. forestry school at the national university)

The purpose of interviews conducted with Ministry or Department of Forests employees and other forest stakeholders is:

i) To discover if and how the Ministry/Department of Forests currently feeds data into the PRS process. If the entity is a Ministry, the individual or unit that liaises with the PRS secretariat may do so directly. If it is a department within a larger ministry, the data pathway will be more indirect.

ii) To understand what data flows into the Forestry Ministry or Department from the local level, how this data is collected, how often it is collected, and in what format it is collated and presented for national level use. Since many Forestry Departments in poor countries are very short of resources, it is often the case that local-level data collection has mainly taken place through the vehicle of donor-funded projects. Data may have been collected in a variety of formats and may be very hard to compare from area to area or over time.

iii) To discover what documentation exists on community forest management, and on any other projects concerned with forests and local people; what data gathering has taken place (in projects or otherwise) on local people's forest dependence; and to which areas of the country it relates.

iv) To check whether the country is developing components of a national forestry program (see Annex 1 for some of the countries which are); what results the nfp has to show; whether any attempt to link the nfp with the PRS has been made; and if so how and with what kinds of data.

v) To understand how data to be forwarded for FAO Forest Resource Assessments are compiled, and to find out whether either methods or data might be of use to the toolkit users.

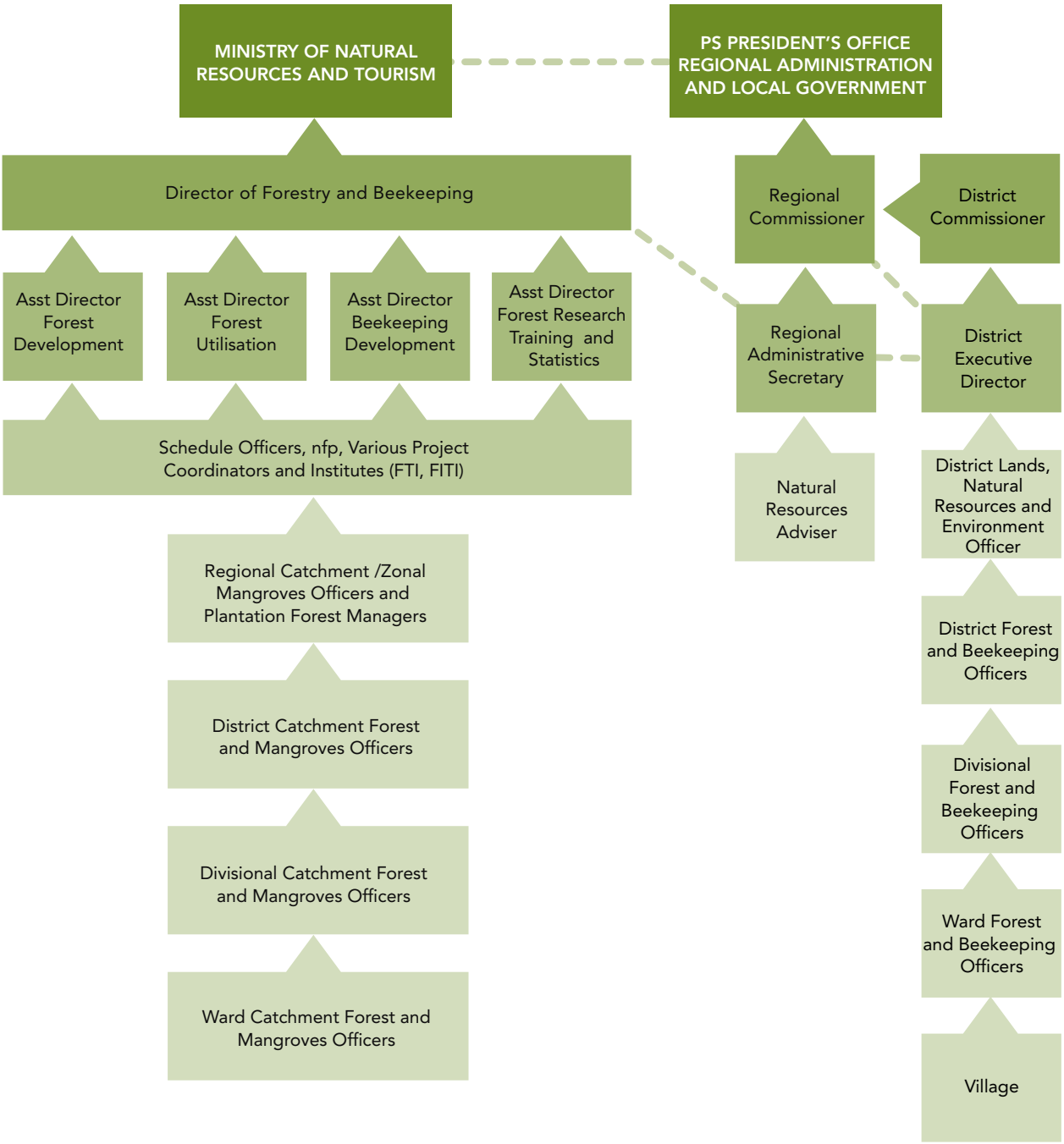
UNDERSTANDING THE INTERFACES BETWEEN LEVELS OF AUTHORITY

In many countries involved in the PRS process, decentralization has taken place in recent years, and the old links between center, province and local level have weakened or become more complicated at the very time when clearer and stronger information pathways are needed. At the same time, as Tara Bedi *et al* (2006) note, in some countries the PRS process has as yet scarcely been communicated to the local level or to the local officials who are involved in it.

Before the toolkit's potential role can be assessed, it is vital that line management and information pathways connecting the local and national level for annual data gathering and for the PRS process be well understood, and potential information breakpoints located. Information may pass sectorally, or be collated at local government level and forwarded to a national ministry (such as that for Local Government). The national level and the local level may have different views about their respective responsibilities, or reporting lines may be pretty clear, if complex, as in the example from Tanzania. New technology may be being brought in to help this link to be made more effectively.

EXAMPLE OF ORGANOGRAM FROM TANZANIA: FOREST & BEEKEEPING ADMINISTRATION (DEPICTING REPORTING LINES)

(i) District level Forestry officials report to the National level (to the Ministry of Local Government) via District level authorities.
(ii) They communicate only very indirectly (dotted lines) to the Director of Forestry and Beekeeping and the Ministry of Natural Resources and Tourism.



It may not be possible to find an organogram illustrating different levels and reporting relationships between those levels. Thus, it may be necessary to generate one through interviews at the national and then at the local levels, looking for discrepancies. By conducting interviews with PRS officials, forestry officials and other ministries with special responsibilities, it becomes possible to understand the lines of authority and routes for monitoring information.

BUILDING INTEREST IN THE TOOLKIT

Sections 2.4 and 2.5 have suggested at some length the lines of enquiry needed for toolkit users to understand the context in which the toolkit might or might not be applicable, but they have not addressed the fact that poverty and forestry stakeholders need to be convinced that it is worth putting some effort into choosing a pathway which will build more consideration of forests into the PRS.

Involving the forest sector

Probably the strongest starting point is within the Forestry Ministry or Department, where there ought to be an interest in making the poverty case on behalf of forests, particularly as government budget cycles begin to develop more directly out of PRSP priorities. The ideal way to begin, along with preliminary discussions and fact-finding, might be with a seminar in which the toolkit users explain the toolkit's purpose and the kinds of data it can produce. If there is a strong body of donors for the forest sector, there should also be presentations to them about what the toolkit is for and what it can do.

The toolkit relies on quick 'snapshot' methods, generating and collating data from small-scale, forest-focused PPAs, selected from a number of sites around the country. These indicate the level and nature of reliance on forests, and the forest-related impediments to and opportunities for poverty reduction identified by local people. The toolkit helps to make a case for greater consideration of the poverty reduction role that forests can play.

At the same time it is important to explain that if the toolkit successfully makes the case for more precise information about the contribution of forests to local people's cash and non-cash incomes, two further steps have to be taken.

(i) First, the Ministry responsible for forests must make representations to the PRS secretariat and working groups, asking for questions to be inserted into existing data gathering instruments such as household surveys and agricultural surveys, in order to capture the contribution of forests to household incomes.

(ii) Second, the forest sector must itself decide how it will gather poverty and forests data in the future, as part of its annual local-level data gathering. Once it starts to collect such data itself, then its own sectoral monitoring can be taken into account in the overall indicators framework of the PRSP. The toolkit may also be able to help generate ideas about how the nfp (national forest program) can develop a more proactive stance to poverty reduction, and work more closely with the PRSP.

The toolkit data can help with the formulation of both of these types of questions.

If there is a forest sector advisory group in country, the toolkit should be presented there, and regular updates and report-backs made as the process unfolds in the field, and when data gathering is complete. If there is not, an advisory group for the toolkit process should be established in the forest ministry/department, containing both key staff, including those responsible for forestry data collection, and donor representatives.

Involving PRS officials

From the poverty side, the first reaction of PRS officials to suggestions that the forest sector has a contribution to

make to poverty reduction may be the standard one: that there are plenty of excluded sectors looking for a place at the PRS table, not all of which can be accommodated. The response to this is that, if the analysis conducted by Vedeld et al (2004) is correct, rural incomes are under-counted by 20-25%. Not only is the poverty reduction capacity of forests being ignored, there is a likelihood of *poverty increase* if forest resources are abruptly made inaccessible to local people.

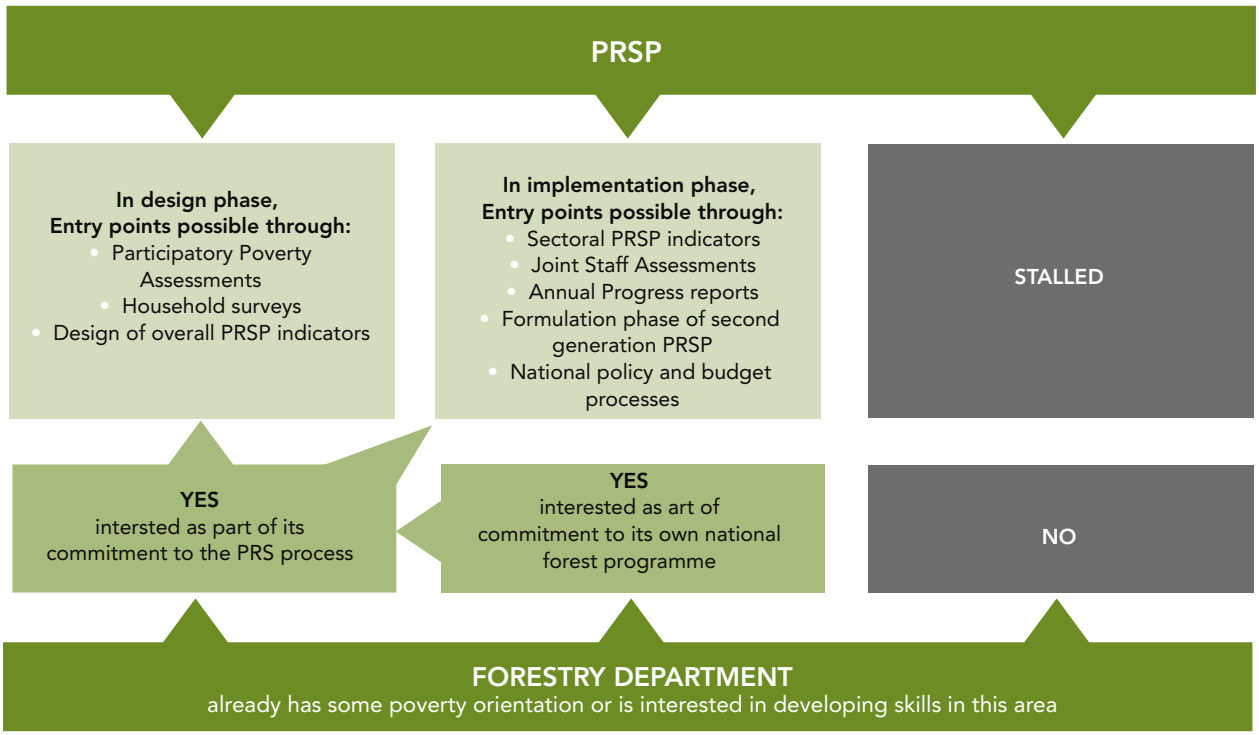
The best way to liaise with the PRS secretariat as the toolkit process unrolls is probably to report regularly to one or more of the PRS working groups, if these are active. But the matter should be discussed with the PRS secretariat and their advice taken on the appropriate contact point and modality.

HOW TO MAKE SURE THE TOOLKIT FITS APPROPRIATELY INTO BOTH THE COUNTRY'S GENERAL POVERTY REDUCTION PROCESS AND INTO THE FOREST SECTOR'S COMMITMENTS AND INTERESTS

The amount of time which might be needed to arrive at a full understanding of a country's PRS process and the level of engagement or potential engagement of the forest sector with it, and with its own national forest program will vary. It will probably take 10-14 person days.

At the end of that time it will be clearer what kind of toolkit process might usefully take place next. Annex 1 shows that countries have varied considerably in the rate at which they have advanced with their PRSP. Some countries have an active or full first or second stage

TABLE 2: A FLOWCHART TO ESTABLISH FOCUS AND ENTRY POINTS FOR THE TOOLKIT



PRSP, often with a country-specific name for the process (e.g. in Madagascar it is called the Madagascar Action Plan rather than PRSP-2). There are also cases evident from the Annex where the forest sector is actively pursuing the development of a national forest program, perhaps through partnership with the nfp facility in FAO, but the country's PRS process has apparently stalled.

By the end of the national level analysis period, it should be possible to see where the country in question fits into this diagram—as a combination of the status and evolution of the PRSP and the commitment to a poverty remit of the forestry department.

The broad possible scenarios can then be seen to be as follows:

(i) The national forestry department is interested in poverty issues and eager for help in making a case to those responsible for the PRS (in whatever its current phase) for the role of forests in poverty reduction.

(ii) The national forestry department is interested in poverty issues and eager for help to incorporate poverty issues into its nfp (and into its reporting to the FAO FRA). However, the PRSP is inactive or not relevant to the Forestry Department.

(iii) The national forestry department is not at this point interested in poverty issues. However, those responsible for the PRS are interested in learning more about the contribution of forests and forest products to the livelihoods of the poor.

(iv) The national forestry department has little interest in poverty reduction and bodies responsible for poverty reduction at the national level are not interested in forests. However, there is pressure from below—from civil society or from sub-national bodies.

In the case of the first three instances, the toolkit field exercise is the same—what is different is what is done with the findings afterwards. In the last case, another process—designed uniquely in the context of a particular country—will be necessary. The rest of the toolkit will assume that one of the first three cases is in play.

National level analysis makes it clear whether the toolkit exercise can proceed with the support and encouragement of the Forestry Ministry or Department, of those responsible for the evolution of the PRS, or of both.

'Champions' of the process and the data are certainly needed: they will see the point of the exercise; take an interest in choices about where and how to collect the data; and be prepared to help the toolkit team once the data is in, to find pathways for the results to have political leverage.[23] If no such champions can be found, the toolkit exercise may well have to be abandoned. There is no point in generating data that will fall into an institutional vacuum.

CHECKLIST OF INFORMATION TO COLLECT AT THE NATIONAL LEVEL PRIOR TO FIELDWORK

This interviews and interactions with policy makers and officials at the national level will generate considerable information and knowledge, as well as build the links that will be needed to feed back toolkit results to the appropriate agencies and individuals. Given the complexity of the information and knowledge involved, this section provides a checklist in tabulated form of the fundamentals that are useful to know before embarking on the field studies. This checklist is by no means comprehensive—much of the knowledge that is needed will be highly country-specific, or emergent knowledge rather than basic facts (e.g. reaching an understanding of whether the results of the toolkit are likely to have traction among national policy audiences and, if so, with which agencies).

23 It is taken as read that there will also probably be a donor for the toolkit process, but that donor alone is not adequate as a champion of the process.

TABLE 3. CHECKLIST OF INFORMATION TO BE COLLECTED AT NATIONAL LEVEL PRIOR TO FIELDWORK

Information	Immediate purpose within the toolkit
1. Key government agencies a. forestry policies b. policies related to forest-livelihood interactions (if different) c. PRS or other poverty reduction and rural development policies d. national census e. other statistics (e.g. forest status and economics, rural livelihoods)	Understanding the key policy frameworks, how they fit together, and promising entry points for delivery of results from the toolkit
2. Indicators a. current PRS indicators that relate to forest dependence (if any) b. current forestry department indicators or regular data collection on forest-livelihood interactions, including both forest dependence (e.g. NTFPs collected) and forest regulations (e.g. number and activity of village-based forest committees) c. current census data and other regular data that relate to forest dependence	Framing the results of the toolkit to inform existing indicators and data collection
3. Poverty maps including both geographic distribution of poverty and depth of poverty	Selecting field sites situated within the poorest parts of the country
4. Forest cover maps mapping of national vegetation and land use	Selecting field sites that represent the key forest types in the country
5. Official definitions a. National poverty line and poverty definitions b. "Forest", "woodland" and any related terms c. Forest products	Aligning definitions used at the site level (e.g. villagers' definitions of who is poor or what constitutes a forest product) with definitions used in national policy dialogue and official policy statements

SECTION THREE

PREPARING AND PRESENTING DATA FOR DIFFERENT AUDIENCES

REPORTING TO THE DISTRICT AND PROVINCIAL LEVELS

Once data gathering is complete, it will need to be analyzed and prepared for presentation, both to the district, and to higher levels beyond the district, in different formats.

As PRS processes have matured in the countries where they are evolving satisfactorily, they have generated a broadening of government ownership, and there have been moves to work more intensively first with line ministries and then with local government.[24]

Decentralization has also given district level officials new planning and reporting responsibilities in many countries, and local and national budgetary cycles may be more systematically linked than before. In some cases (as in Indonesia) decentralization has disrupted the flow of data from the local level to the national level.

This means that the toolkit may be presented at the local level as a means of thinking about how to generate better data for the PRSP, or it may be seen as a tool in its own right for better understanding forest issues in the district, and for planning purposes. In either case, the local level is likely to be the first place where toolkit data will be presented. Thus, higher-level analyses and presentations will follow on from the initial district level analysis.

Maintaining district involvement in the toolkit process

Section 1 of the Field Manual shows how to involve the district beforehand in the Toolkit process, through site selection, discussion, and ideally the involvement in the field of one or two district-level officials. This must be followed up quickly, once the village exercises and the subsequent analysis of results are complete, by a presentation of findings to the district. Otherwise momentum will be lost.

The preliminary presentation of findings

Summary data in chart form (large, cleaned-up versions of the village charts) are presented to the district, based on the main tools used. Where facilities for PowerPoint presentations are unavailable, charts should be adequately large, and of a good enough quality (on A1-size card) to pin up in the district office during discussions, and to leave up afterwards (if officials so choose).

The analysis from the toolkit will result in information on:

- Changes happening in areas likely to impact negatively on natural resources and the way in which the poor can access forests (Tool 3).
- Level of dependency of community members, particularly the poor, on forest products, by gender and by wealth rank (Tool 4).
- Estimates of the proportion of total income that comes from forest products, by gender and by wealth rank (Tool 4).
- Estimates of what this means in cash terms to poorer and wealthier households (Tool 4 + non-toolkit data)
- The forest products that are of greatest importance for household consumption and income (Tool 4—ranked importance of forest products).
- Problems over access and tenure rights, and over the ways in which local regulations are applied. The

24 Linda Van Gelder, "Poverty Reduction Strategies: progress in implementation" World Bank, February 2005.

impact of policy and implementation on access and income, particularly on the poor (Tools 5 and 6).
- In the case of Tool 5, the villagers' own analysis will need to have been supplemented by facilitators, so that the issues which can only be solved by intervention at district or national level are the ones highlighted to district level officials. (The household and intra-village issues are of minor interest at this level).
- Constraints on increasing income from forests (Tool 3 and Tool 5).

Identifying and discussing issues of special relevance to district authorities

District level officials are likely to show most interest in the *Livelihood Analysis* (Tool 4), *Timeline and Trends* (Tool 3), and *Forest Problem and Solution Matrix* (Tool 5). They will also appreciate the light shed on the financial contribution of forests to livelihoods by Tool 8.

A further area of interest to district officials may be the opportunity to be alerted to problems that may be developing. These will be most visible in the results of Tool 3 and Tool 5, although some problems may become apparent through the lens of several of the tools.

For instance, in the case of Tanzania, the toolkit team arrived in the country when a ban on the making of charcoal had just been announced, in response to a new survey which revealed the deforestation rate in the country. It became very evident during the course of the toolkit exercise (see results of Tools 4 and 5) that charcoal was an absolutely vital source of cash in the area where the team worked, and that it would be almost impossible to ban its production. Equally, urban consumers were prepared to go to almost any lengths to buy bags of charcoal. District (and national) authorities asked the toolkit team about the response of villagers to the announcement of the ban, and how likely they were to be able to obey it.

As soon as possible after preliminary findings are analyzed, the data generated by the tools can be written up (using the charts and analyses from them for the most part). This serves to form a more holistic picture of the area where the tools were applied, with a short case study write-up to compare and contrast with other cases from other parts of the country.

A brief fully written-up and illustrated case study should be left with district level officials, or sent to them as soon as possible after the field exercise, so that it can become the basis for other future action.

Discussing with district officials how toolkit results can be used to influence higher level processes

After the presentation of the results from the village, in chart form, and the discussion of key local issues that arise from them, the next step is to decide how this data can be most useful to the district. Equally important is to determine how it can be used for district representation to higher levels.

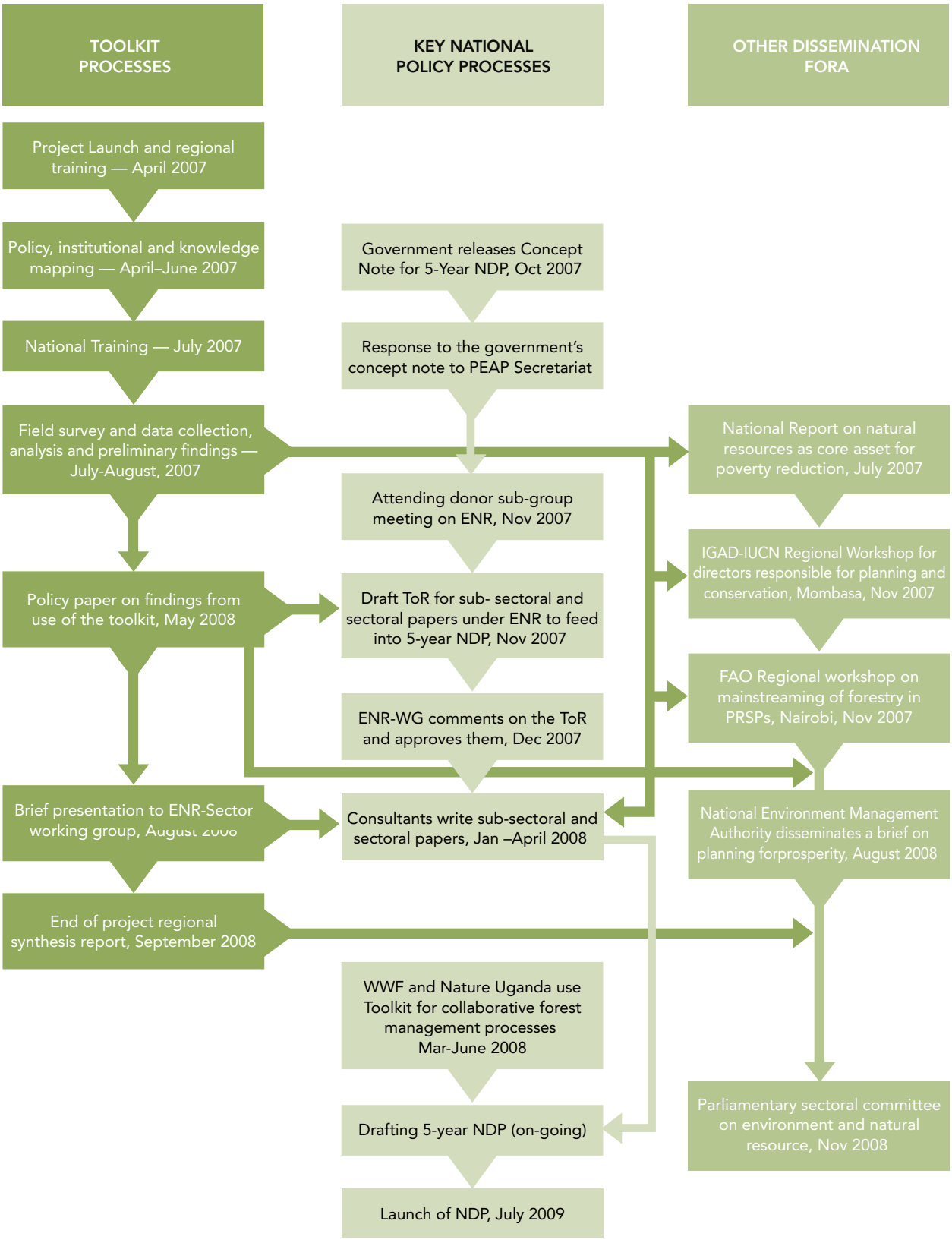
Toolkit data will usually have been gathered with various possible national level scenarios in mind. From the point of view of district officials, toolkit results may be seen to have a bearing:
- on the PRS reporting they are responsible for
- on Forestry Department reporting
- or on both.

Such current reporting formats as exist for the PRS and the forest sectoral pathways need to be re-examined with district officials, in the light of the data collected.

During the toolkit testing process, one suggestion was that the views of district officials on the incorporation of forest contributions to incomes into data gathering systems be written up with the assistance of the toolkit team, for submission to:

(i) the national level body responsible for collecting poverty data and/or

PROCESSES AND FORA IDENTIFIED IN UGANDA FOR MAINSTREAMING THE TOOLKIT



(ii) the Ministry of Forests as it begins to consider how to report on the contribution of forests to poverty reduction.

The report would include the district officials' views about how such data might best be incorporated into regular data gathering systems as they experience them.

In future, if it is accepted that forest product values will be recorded as part of household surveys, enumerators will need some training in ways of estimating shadow prices where forest products are not usually sold (and have no obvious price).

- Products such as fuelwood, honey, charcoal, timber, medicines, and poles are easy to find prices for in local markets.
- For gathered fruits, wild vegetables, mushrooms and fodder, marketed equivalents would provide a proxy price.

It would be useful if district level forestry officials regularly updated lists of the prices of such local forest products, for the use of enumerators.

REPORTING TO THE NATIONAL LEVEL

Introduction

The Poverty-Forests Linkages Toolkit process begins and ends at the national level. The links established in the ministry which manages and monitors the progress of the PRS process, and the ministry which is responsible for forests are the two key points to return to with written-up case studies.

The Department or Ministry of Forests

The place to start is the ministry responsible for forests. When all the data is in from all areas—or sooner, with partial results, if officials are keen for early feedback—there should be a presentation of the following key elements.

If time is available, and officials are sufficiently interested, data from all the Tools should be presented in a PowerPoint presentation and discussed (with only the higher level issues—which cannot be solved at household or village level—drawn to their attention from Tool 5). If the meeting time is short, analyses from only Tools 4, 5 and 8 will make some key points.

Meanwhile the toolkit team will be in the process of preparing a short (6-8 page) case study from each village where toolkit exercises were carried out.

The report on how questions might be incorporated, from the district point of view, will also be presented to the ministry, together with the team's own suggestions drawn from the interviews undertaken before going to the field. The next steps depend on the ministry, and on how engaged the ministry was with the toolkit process before it began. Hopefully the ministry concerned with forests will be eager to use data from the toolkit to make a case for the importance of forests to the poor, when all the district reports are in.

The ministry responsible for forests may also wish to make the case for the contributions of forests to the MDGs. Toolkit results can also be used to flesh out these arguments. A version of this chart showing how to fill it in from toolkit data can be found at the end of the section on Tool 4 and in the village example. Such a chart from each of the areas where toolkit exercises are conducted will be appended to the case studies prepared.

Other ministries

Depending on how the original contacts were made at the national level before setting off to conduct field exercises and on the feedback asked for at the time, it may be necessary to report back to other Ministries directly, as well as indirectly via the Ministry of Forests. Opportunities should be sought in the first instance with the PRS Secretariat and with the PRS working group/s with which contact was established before going to the field.

The case study key results and the suggestions made by the district level for data inclusion should be presented.

Similarly, waiting until results from a variety of districts are ready makes the most sense. If a national level poverty monitoring system is established, or in the process of being established, discussion of appropriate questions or indicators to include may be invited.

In all of these cases, short presentations can be based on results from Tool 4 (see section 3.2.5 for possible themes) and Tool 7 that are of relevance to the national level. Issues such as tenure (or lack of access rights to forests) and poverty are relevant here and the MDG chart may also be useful. The results from the tools should provoke informal discussion of ways in which new data might best be captured in existing data gathering systems. The views of the district, recorded in the report written with them, will also be delivered.

Final formal requests for change must come from the Ministry of Forestry, not from the toolkit team, but much ground can be prepared by the latter, if appropriate. Presentations should also be made to others who expressed an interest before field exercises began. These would certainly include the World Bank, the other main donors interested in poverty and forests and the PRS Working Groups.

Identifying opportunities for getting poverty-forests linkages into data collection systems

As the result of a toolkit exercise, a variety of opportunities for having the contribution of forests and off-farm natural resources to livelihoods included in current data gathering may present themselves.

In the case of Tanzania, the opportunities that arose were:

Opportunity 1: MKUKUTA's Cluster 1 is concerned with growth and the reduction of income poverty. Under this cluster, Goal 4 aims to reduce the income poverty of men and women in rural areas, with the target of 'increased contributions from wildlife, forestry and fisheries to rural incomes'. Monitoring of this goal will be via the Poverty Monitoring System (PMS), through censuses/surveys and routine data collection systems. The PMS will link with the Local Government Monitoring Database (LGMD—currently under development) to ensure the provision of disaggregated data to facilitate monitoring at all levels.

Potential action: Forestry was not originally included in this system due to a lack of understanding of forests' contribution to poverty reduction. The designers of the database are now revisiting this assumption.

Opportunity 2: MKUKUTA cluster priorities and targets are linked sectorally through the Medium Term Expenditure Framework (MTEF) and budgeting processes, that are tied to financial resource allocation.

Potential action: The Forestry and Beekeeping Division has to make a case for its contribution to poverty reduction and suggest indicators it could use to do so. The findings from the toolkit are being used to address this need.

Opportunity 3: Forest and natural resources contributions to poverty reduction are not currently captured by the Household Budget Survey (HBS).

Potential action: However, additional forestry questions are now being debated. Staff in the Ministry of Planning and Empowerment (the new implementing agency for the PRSP) were convinced by data from the toolkit test that forestry needs to be included in the HBS questionnaire.

In the case of Madagascar, the opportunities that arose were:

Opportunity 1: The main policy vehicle for poverty reduction and rural development in Madagascar is the Madagascar Action Plan (MAP), which is a second phase PRSP. MAP's eight overall commitments include *Commitment 4: Rural Development and a Green Revolution* and *Commitment 7: Cherish the Environment*. All sectoral policies come under the umbrella of MAP and aim to achieve the activities and indicators set out in the MAP

master plan. Commitment 7 of MAP sets a target for 2012 for the expansion of land, water and marine protected areas from the current 1.7 million ha up to 6 million ha. To achieve this target, a new program called *Le Système des Aires Protégées de Madagascar* (SAPM) is under development.

Potential action: SAPM could include indicators not only on land area, but also on poverty reduction and equity, for example the percentage of tourist revenues that go to local communities.

Opportunity 2: Other forest-related indicators in MAP's commitment 7 are reforestation, use of alternative energies, reduction in burnt areas, sustainable use plans, forest control units and tracking systems. Commitment 4 of MAP does not mention forestry explicitly, but does acknowledge non-agricultural enterprises as a component of diversified rural livelihoods. A key target for Commitment 4 is to raise rural households incomes from US$123 per household per year in 2005 to US$370 in 2012. The toolkit demonstrated that rural households in Madagascar gain about a third of their income from forests—but this portion of income is not included in current data collection.

Potential action: The Observatoire Economique (the agency in charge of collecting economic statistics for MAP) could include forest income within household economy data—which would not only be more accurate, but go some way towards helping the government meet ambitious targets for raising rural incomes.

Opportunity 3: The Information service of the Ministry of Environment, Water and Forests and Tourism (MEEFT) collects regular, high-quality data relevant to forest livelihoods (e.g. resource abundance and management activities at commune-level), but these are not well communicated beyond the forest sector.

Potential action: The data already collected by the Information Service of MEEFT could be exploited to monitor the performance of forestry in achieving MAP. The Information Service of MEEFT could work in partnership with the Observatoire Economique to work out how best to analyze and present this data to provide an effective evaluation of progress.

Forest dependency by the rural poor—using Tool 4 to provide a national perspective

Tool 4 provides a quantitative insight into forest product use at the village-level. However, to have impact at the national level, this type of exploratory analysis needs to be supplemented by further comparative study across all the sample villages in order to present a broader picture of forest product use within the national economy. It should be emphasized that this analysis cannot be given with any statistical confidence. However, the results will still likely be of value in policy circles, as they will highlight probable levels of dependence and usage of forest products where often no other figures exist. This approach may justify more rigorous data collection subsequently to understand more fully the key issues that have been identified.

This type of analysis should only be undertaken by computer, using standard spreadsheet software. A simple, integrated spreadsheet was developed to answer the following five questions, which emerged from an analysis of the four country studies where the toolkit was tested in 2008. The spreadsheet template is shown at the end of this section and can be downloaded from the PROFOR website.

1. *How important are forest products to rural peoples' livelihoods?* This is a key figure with which to engage national planners. If the contribution of forest products to rural peoples' livelihoods is very low there would be little justification for promoting its attention in national policy circles. A case has to be made that the consideration of forest issues is a strategic priority for those involved in developing national poverty reduction strategies.

From the country studies, it emerges that approximately one third of all rural household livelihoods are derived from forest product use. The data from Cameroon showed higher levels of use. Under such circumstances the absence of detailed considerations of forest use within the national poverty reduction strategy would leave a large hole in such a strategy.

Country	Forest product contribution to household livelihoods (%)	Poorer households (%)	Wealthier households (%)
Uganda	30	31	29
Ghana	35	35	35
Cameroon	45	44	46
Madagascar	29	30	27

2. *How integrated with the cash economy are rural people?* This second question provides some insight into the potential for cash-based growth strategies to deliver poverty reduction in the short-term. The balance between the subsistence and cash economy across all sites can be estimated from participants' scoring of tool 4. Across the country case studies where the toolkit was tested, it can be seen that up to one half of rural peoples' livelihoods is cash-based; the remainder never enters the cash economy. Clearly different poverty reduction strategies may be appropriate in countries such as Madagascar's largely subsistence-based economy compared to that of the more monetized economies of Ghana and Uganda.

Country	Subsistence use (%)	Cash generation (%)
Uganda	52	48
Ghana	51	49
Cameroon	59	41
Madagascar	63	37

3. *Are forest products more important for subsistence or cash generation?* In addition to reviewing the combined contribution of forest products, it is also worthwhile to look at the separate statistics for the average contribution made by forest products to subsistence use and their average contribution to cash income.

Different conditions were found to exist across the four country studies undertaken in 2008. In Uganda and Ghana forest products are of greater importance for subsistence use. (Therefore a case could be made in terms of the importance of their role in reducing the vulnerability of rural communities to external shocks). In contrast, in Cameroon the sale of forest products appears to be an important commercial activity for many rural people. The situation suggested for Madagascar is that forest products are not a major source of livelihood for the agrarian communities that were sampled. Under such circumstances making the case for poverty-forests linkages at the national level will clearly require a more nuanced approach.

Country	Forest product contribution to subsistence use (%)	Poorer households (%)	Wealthier households (%)
Uganda	43	40	45
Ghana	49	49	50
Cameroon	41	44	39
Madagascar	37	39	34

Country	Forest product contribution to cash generation (%)	Poorer households (%)	Wealthier households (%)
Uganda	18	23	13
Ghana	21	23	20
Cameroon	49	45	53
Madagascar	16	15	16

4. *Is the balance between subsistence use and cash generation similar for agricultural crops and forest products?* The ratio of subsistence to cash for agricultural

crops and separately for forest products is a useful comparison that helps to explain the 'visibility' of forest products in the national economy. For example, in both Uganda and Ghana the contribution of forest products to cash income is much less than for agricultural products, which may help to explain their limited consideration in the first iteration of these countries' PRSPs. For Cameroon and Madagascar the situation is reversed, with forest products playing a greater contribution to peoples' cash income.

Country	Ratio of subsistence to cash for agricultural crops	Ratio of subsistence to cash for forest products
Uganda	1:1	3:1
Ghana	1:1	2:1
Cameroon	2:1	1:1
Madagascar	2:1	1:1

5. *Forest product contribution to cash income.* The above tables provide some 'headline' figures around which various policy messages can be constructed that will be of interest at the national level. However, the analysis of tool 4 can go one step further and provide a graphical summary across sites and by wealth and gender. Gender, in particular, is recognized as an important determinant of wealth status and so current use of forest products by gender may provide some clues for further interesting lines of enquiry.

   The four charts that follow are automatically produced on completion of the standard project spreadsheet to show how the cash component of respondents' combined income from forest products varies across respondent groups and sample sites (similar charts are also produced for the non-cash component).

These graphs can highlight interesting patterns of forest product use that can be developed into policy messages for consideration at the national level. For example:

(a) in Ghana

- As a contribution to cash income, forest products are more important for women than for men. This holds as incomes (i.e. wealth status) rise. Forest products represent a significant source of cash for poor women. Income earned from the sale of forest products represented 20-30% of poor women's' total livelihood in two of the sample villages.
- For cash income, the northern savannah forests (surrounding the villages of Siisi and Dagare) appear to provide a greater contribution to rural livelihoods than the southern high canopy forests. This is closely related to the presence of a forest product (the shea nut tree—*Vitellaria paradoxa*) that can be readily commercialised by individuals (mostly women).

(b) in Uganda

- In the south-west villages (Ncundura and Muhindura) poor men from the Abatwa culture make considerable commercial use of forest products due to their intimate knowledge of the forest. This is despite many of them having been evicted from statutorily protected forest areas. Without access to land, government is faced with a major challenge to secure for them alternative sources of livelihood. Land disputes—and continuing forest loss—can be expected to continue until there is a resolution of their situation.

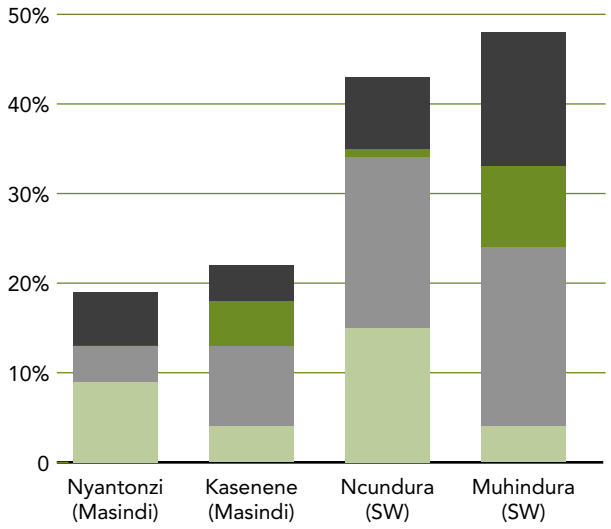
(c) in Cameroon

- The relative high levels of cash generation from forest products in Mapanja village are related to the presence of a high value forest product: the bark of *Prunus africana*.

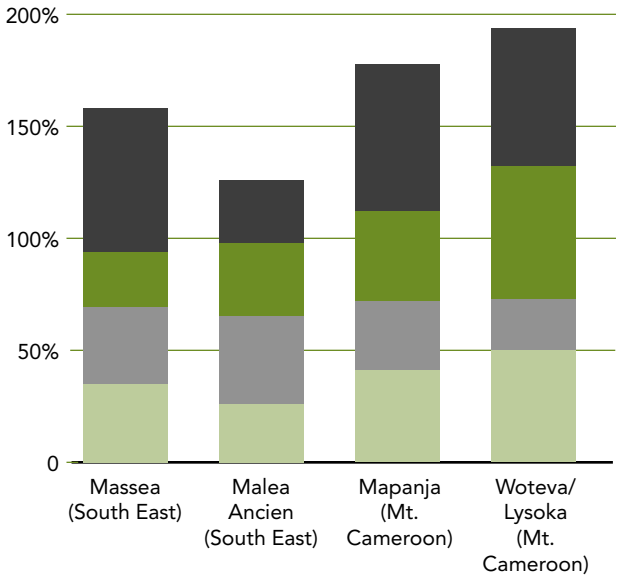
Preparation of a national briefing paper

Once all the analysis is complete, it is necessary to draw some conclusions and present these in a briefing paper that will hold the attention of those involved in policy development. The target audience of this paper will be those decision-makers at national level, within the civil service (most importantly in the agencies responsible for poverty reduction strategies, forestry

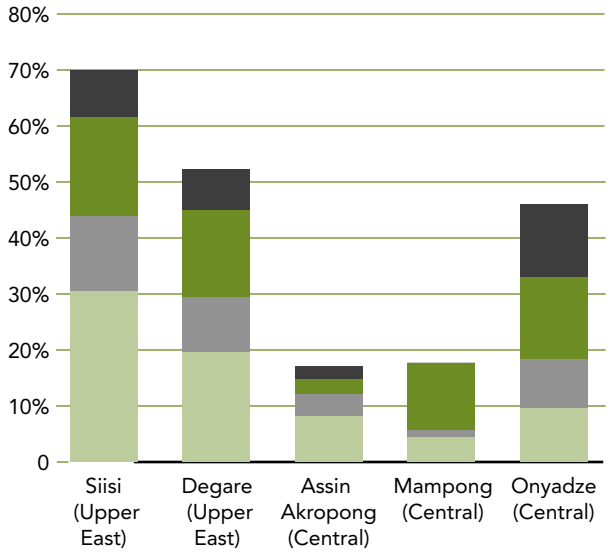
FOREST PRODUCT CONTRIBUTON TO CASH INCOME
UGANDA



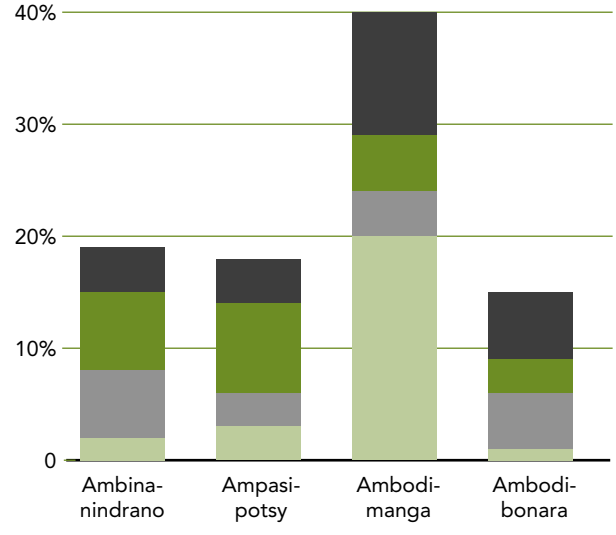
FOREST PRODUCT CONTRIBUTON TO CASH INCOME
CAMEROON

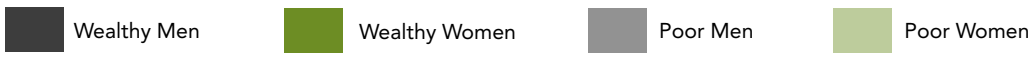


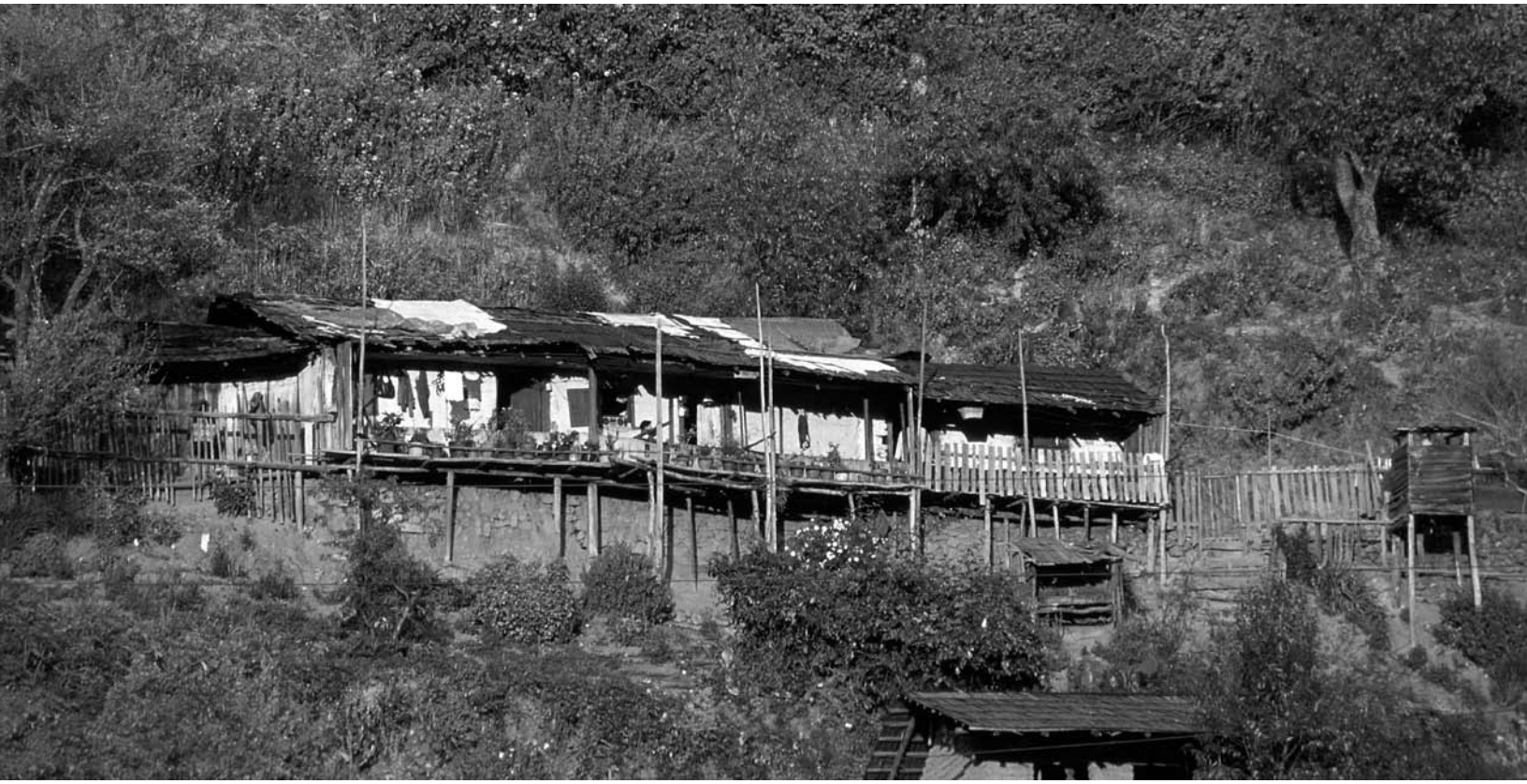
FOREST PRODUCT CONTRIBUTON TO CASH INCOME
GHANA



FOREST PRODUCT CONTRIBUTON TO CASH INCOME
MADAGASCAR







and collection of statistics) and in parliament. Secondary audiences are decision-makers at the international level (e.g. World Bank) and sub-national level (e.g. District Officers).

The purpose of the briefing paper is to provide national-level policy makers with the key messages and recommendations that arise from the toolkit. The policy brief will achieve this purpose by linking the field results with national-level policy priorities and processes. The briefing paper that was used in Uganda is provided as a sample in this toolkit, just following this Overview.

It is important to identify a champion for this policy paper, someone who has sufficient standing so as to influence the national policy process. This person should be consulted at the beginning of drafting the paper and the findings discussed to identify the key policy messages and the evidence on which these messages are based. Where the exercise is sponsored by the World Bank, the WB person in-country should also be brought on board early on for similar reasons.

Overall, it is suggested that the policy brief:

- Be concise (a maximum 8 pages, but aim for less)
- Be laid out attractively, using colour and professional layout if possible
- Include maps, photos and diagrams as far as space allows
- Provide clear evidence for assertions made
- Concentrate on 4-6 key policy messages rather than attempt a comprehensive report of all the results of the toolkit

- Use text boxes for all non-critical information, so that readers can move through the document quickly on their first reading

Suggested table of contents:

1. Recommendations for policy (conclusions)
2. Introduction: rationale and approach
3. Poverty & forestry context: status and policy
4. Key findings of the toolkit
5. Further information

Content within each of these sections:

4. Recommendations for policy

This section should be written last, but should appear first, at the front of the policy brief. It needs to contain a limited number of clear, hard-hitting messages, presented as bullet points. This section should be used to relate the toolkit findings to policies, institutions and indicators. Relevant points will be country specific, however important areas to include might be:

- Governance: do the findings suggest that decisions on forestry should be taken in different ways, e.g. new kinds of inter-sectoral links or a different balance between national-level and local-level authority?
- Information and coordination: do the findings suggest a need for coordinating the viewpoints of various agencies (e.g. different definitions and comprehension of forest products or forest functions, how small-scale forestry is included in GDP calculations or other economic data)?
- Indicators: do the findings suggest any new indicators for the PRS, census, MDGs, district-level data collection etc? Or, alternatively, different interpretations of current statistics?
- Budget allocations: do the findings suggest that national budget allocations to forestry as a whole, or sub-allocations within forestry should be adjusted, and how? (This is an ambitious area in which to comment, but it may be relevant to make a strong point on this in certain countries, e.g. in Madagascar where there is little or no financial and institutional allocation to livelihoods issues in forestry, only conservation).

2. Introduction: rationale and approach

This requires one punchy paragraph on why the policy brief matters and what gap it is trying to fill. You could use a general approach (e.g. *forestry has a low profile within national policies and strategies for poverty reduction. But forestry is very important in people's livelihoods—it is just that this contribution is difficult to recognise and quantify*…etc) or a nationally specific approach (e.g. *Cameroon is in the process of designing and implementing a new PRSP. Forestry has an important role in rural people's livelihoods, but this is not well documented or quantified*…etc). Any additional material considered critical to the story can go here—but it should be kept brief.

3. Poverty & forestry context: status and policy

(a) Status and links: What is the poverty status of the country? This should include the basic statistics on numbers of people in poverty, depth of poverty, distribution geographically or in different segments of society and include a poverty map. What is the status of forest cover in the country? This requires a basic description of forest cover types and another map. Other forestry statistics or issues may also be included, such as contribution to GDP, allocation from the annual government budget, or the relative role of large-scale and small-scale enterprises. This must be very brief, identifying the strategic and contentious issues only, e.g. is illegal use a major issue? Are there conf icts in rural areas over access rights? Finally, are there any clear correlations and links between incidence of forestry and distribution of vegetation types? (Answer is likely to be "no" in most countries).

(b) Policy and indicators: What are the main policy vehicles for poverty reduction and rural development? (PRSP-equivalent & others; MDGs, if relevant) Is forestry part of these strategies? Explain. What indicators

are used to measure trends in poverty? Are any of the indicators related to forest livelihoods? Next, what are the main forest policy priorities and processes, and are livelihoods and poverty reduction included or excluded? Explain. What indicators are used to measure trends in forests and forestry? These are important. Try to find the 'forest' indicators in the PRSP monitoring system and highlight in a text box. Comment on their power to capture the critical issues that have already been raised. Are any of the indicators related to forest livelihoods? It may be useful to include a diagram of the key policy processes and institutions and the links between national and sub-national levels.

4. Key findings of the toolkit

The key relevant findings for policy makers should then be highlighted. It is difficult to give precise guidance here because what policy makers will need to hear will differ from country to country. Some tips are:

- Make points that policy makers are unlikely to know already, or are in dispute (e.g. they probably don't need to be told "People use firewood for cooking and graze their cattle in the forest").
- Use the "rule of seven" (7 = the number of points people can comfortably absorb and hold at one time) to guide the number of findings that are presented.
- Include points in two areas: (a) how people use forests (from tools 2-5) and (b) people's perceptions of forest problems and solutions, sticking to the solutions that national-level policy makers are able to address (from tools 6-7). However, there is no need to report on every tool used.
- Draw attention to any important differences among different types of people (by gender and wealth class) and different localities (overall forest type, and contrasts between nearby villages)
- Go back and check! (a) Check results across all sites and all groups (poor men, poor women, rich women, rich men) before drawing out a finding to go into the policy brief—if there are differences, comment on them, and (b) check results against policy issues—how does the finding inform policy and is the same language being used as that of policy makers?

Depending on the nature of debate in country, there may or may not be the need to include some discussion to demonstrate the applicability of the site-level results to the national level. Only include this material if you think the policy brief will be rejected by policy makers because it is "not representative" or "irrelevant," e.g.

- To what extent the sites are representative of the country as a whole (or representative of the areas where people have forest-dependent livelihoods)
- Comparison of the definitions used by local people and by the project compared to definitions in national policy statements (such as "poor" or "forest product")

5. Further information

Provide a clear set of contacts for further information (name, email and phone number), acknowledge support received and note the link to the PROFOR website, so that anyone can download the entire toolkit (currently http://www.profor.info/content/livelihood_draft_toolkit.html)

Dissemination

When the briefing paper is complete, its writers and its sponsor should make every effort to disseminate it, to present it widely and to engender discussion of the need for a higher profile for forests in the context of poverty. A series of launch events should be planned, with presentations in both government and non-governmental venues.[25]

The World Bank can help to further raise the profile of forests in the PRSP, by ensuring that its Joint Staff Assessments flag up the toolkit process and its results to the

25 Make sure that each district that contributed to the exercise gets several copies.

Boards of the IMF and the World Bank, and even more importantly in the feedback provided to countries to help them to improve their strategies. The Bank can also help by encouraging the PRS secretariat and Board in-country to make reference to toolkit findings in Annual Progress Reports.

Finally, multi-country comparisons of toolkit findings in several countries will be of great value.

The Policy Brief that was prepared in the context of piloting this Toolkit in Uganda and used to input into national processes is included in this toolkit as just one example.

BACK-UP DOCUMENTS (TO BE KEPT BY THE RESEARCHER IN CASE ANY POLICY MAKERS FOLLOW UP AND REQUEST MORE INFORMATION)

Annex	Content	Format
Poverty mapping	National poverty maps and rationale for site selection	Poverty maps; site location maps; criteria for selection
Policy mapping	1. Policy content, processes and spaces (PRSP and forest policy) 2. Policy actors 3. Policy knowledge 4. Suggested indicators for different aspects of PRSP and forest policy	1. Clear concise description and/or diagrams of key PRSP & forest policy 2. List + organogram (see example on p24 of Toolkit Part 1) 3. Annotated list of existing research and policy documents (see example for Tanzania) 4. See table on p7 of country team ToR
Village write-ups	Results of the toolkit exercises summarised for communication to policy makers	Base on Annex 2 of Part 1 of the Toolkit
Raw data from villages	Copies of original data sheets from toolkit exercises	As per toolkit
Toolkit evaluation reports	1. User evaluations 2. Audience /Participatory evaluations (village, district, national)	Use evaluation sheets supplied by international team

ANNEX ONE

STATUS OF PRSPS AS OF AUGUST 2008, WITH NFP STATUS AND WORLD BANK COUNTRY INCOME CLASSIFICATION

COUNTRIES INVOLVED IN PRSPS (AS OF AUGUST 2008) TOGETHER WITH NFPS AND WORLD BANK COUNTRY INCOME CLASSIFICATION

Country	Region	Country classification	PRSP experience	Partnership with NFP facility
Benin	AFR	low income	PRSP II (2008)	2007
Burkina Faso	AFR	low income	PRSP II (2004)	2007
Burundi	AFR	low income	PRSP (2006)	No
Cameroon	AFR	lower middle income	PRSP (2003)	No
Cape Verde	AFR	lower middle income	PRSP II (2008)	No
CAR	AFR	low income	PRSP (2006)	No
Chad	AFR	low income	PRSP (2003)	No
Comoros	AFR	low income	I-PRSP (2005)	No
Congo DR	AFR	low income	PRSP II (2007)	2003
Congo Rep.	AFR	lower middle income	I-PRSP (2004)	2004
Cote d'Ivoire	AFR	low income	I-PRSP (2002)	No
Ethiopia	AFR	low income	PRSP (2002)	2007
G. Bissau	AFR	low income	I-PRSP (2000)	No
Gambia	AFR	low income	PRSP II (2007)	No
Ghana	AFR	low income	PRSP II (2005)	2003
Guinea	AFR	low income	PRSP II (2006)	2007
Kenya	AFR	low income	PRSP (2004)	2003
Lesotho	AFR	lower middle income	PRSP II (2006)	2003
Madagascar	AFR	low income	PRSP II (2007)	No
Malawi	AFR	low income	PRSP II (2006)	2002
Mali	AFR	low income	PRSP II (2008)	2003
Mauritania	AFR	low income	PRSP II (2006)	No
Mozambique	AFR	low income	PRSP II (2006)	2003
Niger	AFR	low income	PRSP II (2008)	2003
Nigeria	AFR	low income	PRSP (2005)	2002
Rwanda	AFR	low income	PRSP II (2008)	2003

COUNTRIES INVOLVED IN PRSPS (AS OF AUGUST 2008) TOGETHER WITH NFPS AND WORLD BANK COUNTRY INCOME CLASSIFICATION

Country	Region	Country classification	PRSP experience	Partnership with NFP facility
Sao Tome/Pr	AFR	low income	PRSP II (2005)	No
Senegal	AFR	low income	PRSP III (2007)	2003
Sierra Leone	AFR	low income	PRSP (2005)	2007
Tanzania	AFR	low income	PRSP II (2005)	2002
Uganda	AFR	low income	PRSP II (2005)	2003
Zambia	AFR	low income	PRSP III (2007)	2005
Cambodia	EAP	low income	PRSP II (2005)	2007
Indonesia	EAP	lower middle income	I-PRSP (2003)	2003
Lao PDR	EAP	low income	PRSP (2004)	2007
Mongolia	EAP	low income	PRSP (2003)	2002
Timor Leste	EAP	low income	PRSP (2002)	No
Vietnam	EAP	low income	PRSP II (2006)	2005
Afghanistan	SA	low income	PRSP (2008)	No
Bangladesh	SA	low income	PRSP (2005)	No
Bhutan	SA	low income	PRSP (2004)	No
Nepal	SA	low income	PRSP (2003)	2007
Pakistan	SA	low income	PRSP (2003)	2004
Sri Lanka	SA	lower middle income	PRSP (2002)	No
Djibouti	MENA	lower middle income	PRSP (2004)	No
Yemen	MENA	low income	PRSP (2002)	No
Bolivia	LAC	lower middle income	PRSP (2001)	No
Dominica	LAC	lower middle income	PRSP (2006)	No
Grenada	LAC	upper middle income	I-PRSP (2006)	No
Guyana	LAC	lower middle income	PRSP (2002)	No
Haiti	LAC	Low income	PRSP (2008)	
Honduras	LAC	lower middle income	PRSP (2001)	2003
Nicaragua	LAC	lower middle income	PRSP II (2005)	2005
Albania	ECA	lower middle income	PRSP II (2008)	No
Armenia	ECA	lower middle income	PRSP (2003)	2005
Azerbaijan	ECA	lower middle income	PRSP (2003)	No
Bosnia-Herz	ECA	lower middle income	PRSP (2004)	No
Georgia	ECA	lower middle income	PRSP (2003)	2004

COUNTRIES INVOLVED IN PRSPS (AS OF AUGUST 2008) TOGETHER WITH NFPS AND WORLD BANK COUNTRY INCOME CLASSIFICATION

Country	Region	Country classification	PRSP experience	Partnership with NFP facility
Kyrgyzstan	ECA	low income	PRSP (2002)	2005
Macedonia	ECA	lower middle income	I-PRSP (2000)	No
Moldova	ECA	lower middle income	PRSP II (2008)	No
Serbia and Mont.	ECA	lower middle income	PRSP (2004)	No
Tajikistan	ECA	low income	PRSP (2002)	No
Uzbekistan	ECA	low income	PRSP (2007)	2007

ACRONYMS

I-PRSP	Interim PRSP
PRSP (Year)	First PRSP (date)
PRSP II (Year)	Second generation PRSP (date)
PRSP III (Year)	Third generation PRSP (date)
AFR	Sub-Saharan Africa Region
EAP	East Asia and Pacific Region
ECA	Europe and Central Asia
LAC	Latin America and Caribbean
MENA	Middle East and North Africa Region
SA	South Asia Region

Source: http://go.worldbank.org/3H3F9VITD0

WORLD BANK COUNTRY INCOME CLASSIFICATION

Low income	$875 or less
Lower middle income	$876-3,465
Upper middle income	$3,466-10,725

DEVELOPING COUNTRIES WHICH ARE NOT ENGAGED IN THE PRSP PROCESS BUT WHICH ARE ACTIVE PARTNERS OF THE NFP FACILITY:

Upper Middle Income
Equatorial Guinea, South Africa, Chile, Palau

Lower Middle Income
Morocco, Namibia, Tunisia, China, Thailand, Philippines, Vanuatu, Colombia, Cuba, Ecuador, Guatemala, Jamaica, Paraguay

Low Income
Sudan

Recent partners in NFP Facility
Angola, Belize, Dominican Republic, El Salvador

ANNEX TWO

FURTHER READING ON FORESTS AND POVERTY

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Sunderlin, W., Dewi, S. and Puntodewo, A. 2007. **Poverty and forests: multi-country analysis of spatial association and proposed policy solutions.** CIFOR Occasional Paper 47. Center for International Forestry Research, Bogor, Indonesia.

Wunder, S. 2001. **Poverty alleviation and tropical forests—what scope for synergies?** World Development 29: 1817-1834.

ANNEX THREE

SPREADSHEET TEMPLATE USED TO PROVIDE NATIONAL OVERVIEW, AND WORKED EXAMPLE FROM UGANDA

WORKED EXAMPLE FROM UGANDA

	Poor women			Poor men			Wealthy women			Wealthy men		
Nyantonzi (Masindi)	*Cash income*	*40*		*Cash income*	*35*		*Cash income*	*75*		*Cash income*	*46*	
	Farm - crops	30		Farm - crops	29		Farm - crops	63		Farm - crops	35	
	Farm - animals			Farm - animals			Farm - animals			Farm - animals		
	Forest	9	23	Forest	4	11	Forest	0	0	Forest	6	13
	Other	1		Other	2		Other	12		Other	5	
	Non-cash income	*60*		*Non-cash income*	*65*		*Non-cash income*	*25*		*Non-cash income*	*54*	
	Farm - crops	43		Farm - crops	40		Farm - crops	10		Farm - crops	6	
	Farm - animals			Farm - animals			Farm - animals			Farm - animals		
	Forest	4	7	Forest	24	37	Forest	13	52	Forest	42	78
	Other	13	13	Other	1	28	Other	2	13	Other	6	48
	Total	*100*			*100*			*100*			*100*	
Kasenene (Masindi)	*Cash income*	*52*		*Cash income*	*32*		*Cash income*	*43*		*Cash income*	*23*	
	Farm - crops	44		Farm - crops	21		Farm - crops	34		Farm - crops	17	
	Farm - animals			Farm - animals			Farm - animals			Farm - animals		
	Forest	4	8	Forest	9	28	Forest	5	12	Forest	4	17
	Other	4		Other	2		Other	4		Other	2	
	Non-cash income	*48*		*Non-cash income*	*68*		*Non-cash income*	*57*		*Non-cash income*	*77*	
	Farm - crops	30		Farm - crops	47		Farm - crops	40		Farm - crops	38	
	Farm - animals			Farm - animals			Farm - animals			Farm - animals		
	Forest	18	38	Forest	21	31	Forest	17	30	Forest	39	51
	Other		22	Other		30	Other		22	Other		43
	Total	*100*			*100*			*100*			*100*	
Ncundura (SW)	*Cash income*	*67*		*Cash income*	*36*		*Cash income*	*30*		*Cash income*	*37*	
	Farm - crops	26		Farm - crops	16		Farm - crops	16		Farm - crops	22	
	Farm - animals			Farm - animals			Farm - animals			Farm - animals		
	Forest	15	22	Forest	19	53	Forest	1	3	Forest	8	22
	Other	26		Other	1		Other	13		Other	7	
	Non-cash income	*33*		*Non-cash income*	*64*		*Non-cash income*	*70*		*Non-cash income*	*63*	
	Farm - crops	16		Farm - crops	20		Farm - crops	46		Farm - crops	41	
	Farm - animals			Farm - animals			Farm - animals			Farm - animals		
	Forest	17	52	Forest	44	69	Forest	24	34	Forest	22	35
	Other		32	Other		63	Other		25	Other		30
	Total	*100*			*100*			*100*			*100*	
Muhindura (SW)	*Cash income*	*63*		*Cash income*	*60*		*Cash income*	*52*		*Cash income*	*76*	
	Farm - crops	35		Farm - crops	28		Farm - crops	42		Farm - crops	48	
	Farm - animals			Farm - animals			Farm - animals			Farm - animals		
	Forest	4	6	Forest	20	33	Forest	9	17	Forest	15	20
	Other	24		Other	12		Other	1		Other	13	
	Non-cash income	*37*		*Non-cash income*	*40*		*Non-cash income*	*48*		*Non-cash income*	*24*	
	Farm - crops	17		Farm - crops	21		Farm - crops	24		Farm - crops	16	
	Farm - animals			Farm - animals			Farm - animals			Farm - animals		
	Forest	16	43	Forest	19	48	Forest	22	46	Forest	8	33
	Other	4	20	Other		39	Other	2	31	Other		23
	Total	*100*			*100*			*100*			*100*	

48	% cash income	
Percentage contribution to cash income		
13	Wealthy	
23	Poor	
18	Combined	
Percentage contribution to non-cash income		
45	Wealthy	
40	Poor	
43	Combined	
Percentage contribution to combined		
29	Wealthy	
31	Poor	
30	Combined	

Farm		Ratio
Subsistence total	455.0	
Cash total	506.0	0.9
Forest		
Subsistence total	350.0	
Cash total	132.0	2.7

SPREADSHEET TEMPLATE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		**Poor women**			**Poor men**			**Wealthy women**			**Wealthy men**			
2														
3	**Village 1**	*Cash income*	*=SUM(C4:C7)*		*Cash income*	*=SUM(F4:F7)*		*Cash income*	*=SUM(I4:I7)*		*Cash income*	*=SUM(L4:L7)*		
4		Farm - crops			Farm - crops			Farm - crops			Farm - crops			
5		Farm - animals			Farm - animals			Farm - animals			Farm - animals			
6		Forest		=+C6/C3*100	Forest		=+F6/F3*100	Forest		=+I6/I3*100	Forest		=+L6/L3*100	
7		Other			Other			Other			Other			
8														
9		*Non-cash income*	*=SUM(C10:C13)*		*Non-cash income*	*=SUM(F10:F13)*		*Non-cash income*	*=SUM(I10:I13)*		*Non-cash income*	*=SUM(L10:L13)*		
10		Farm - crops			Farm - crops			Farm - crops			Farm - crops			
11		Farm - animals			Farm - animals			Farm - animals			Farm - animals			
12		Forest		=+C12/C9*100	Forest		=+F12/F9*100	Forest		=+I12/I9*100	Forest		=+L12/L9*100	
13		Other		=+C6+C12	Other		=+F6+F12	Other		=+I6+I12	Other		=+L6+L12	
14														
15		*Total*	*=+C9+C3*			*=+F9+F3*			*=+I9+I3*			*=+L9+L3*		
16														
17														
18	**Village 2**	*Cash income*	*=SUM(C19:C22)*		*Cash income*	*=SUM(F19:F22)*		*Cash income*	*=SUM(I19:I22)*		*Cash income*	*=SUM(L19:L22)*		
19		Farm - crops			Farm - crops			Farm - crops			Farm - crops			
20		Farm - animals			Farm - animals			Farm - animals			Farm - animals			
21		Forest		=+C21/C18*100	Forest		=+F21/F18*100	Forest		=+I21/I18*100	Forest		=+L21/L18*100	
22		Other			Other			Other			Other			
23														
24		*Non-cash income*	*=SUM(C25:C28)*		*Non-cash income*	*=SUM(F25:F28)*		*Non-cash income*	*=SUM(I25:I28)*		*Non-cash income*	*=SUM(L25:L28)*		
25		Farm - crops			Farm - crops			Farm - crops			Farm - crops			
26		Farm - animals			Farm - animals			Farm - animals			Farm - animals			
27		Forest		=+C27/C24*100	Forest		=+F27/F24*100	Forest		=+I27/I24*100	Forest		=+L27/L24*100	
28		Other		=+C21+C27	Other		=+F21+F27	Other		=+I21+I27	Other		=+L21+L27	
29														
30		*Total*	*=+C24+C18*			*=+F24+F18*			*=+I24+I18*			*=+L24+L18*		
31														
32														
33	**Village 3**	*Cash income*	*=SUM(C34:C37)*		*Cash income*	*=SUM(F34:F37)*		*Cash income*	*=SUM(I34:I37)*		*Cash income*	*=SUM(L34:L37)*		
34		Farm - crops			Farm - crops			Farm - crops			Farm - crops			
35		Farm - animals			Farm - animals			Farm - animals			Farm - animals			
36		Forest		=+C36/C33*100	Forest		=+F36/F33*100	Forest		=+I36/I33*100	Forest		=+L36/L33*100	
37		Other			Other			Other			Other			
38														
39		*Non-cash income*	*=SUM(C40:C43)*		*Non-cash income*	*=SUM(F40:F43)*		*Non-cash income*	*=SUM(I40:I43)*		*Non-cash income*	*=SUM(L40:L43)*		
40		Farm - crops			Farm - crops			Farm - crops			Farm - crops			
41		Farm - animals			Farm - animals			Farm - animals			Farm - animals			
42		Forest		=+C42/C39*100	Forest		=+F42/F39*100	Forest		=+I42/I39*100	Forest		=+L42/L39*100	
43		Other		=+C36+C42	Other		=+F36+F42	Other		=+I36+I42	Other		=+L36+L42	
44														
45		*Total*	*=+C39+C33*			*=+F39+F33*			*=+I39+I33*			*=+L39+L33*		
46														
47														
48	**Village 4**	*Cash income*	*=SUM(C49:C52)*		*Cash income*	*=SUM(F49:F52)*		*Cash income*	*=SUM(I49:I52)*		*Cash income*	*=SUM(L49:L52)*		
49		Farm - crops			Farm - crops			Farm - crops			Farm - crops			
50		Farm - animals			Farm - animals			Farm - animals			Farm - animals			
51		Forest		=+C51/C48*100	Forest		=+F51/F48*100	Forest		=+I51/I48*100	Forest		=+L51/L48*100	
52		Other			Other			Other			Other			
53														
54		*Non-cash income*	*=SUM(C55:C58)*		*Non-cash income*	*=SUM(F55:F58)*		*Non-cash income*	*=SUM(I55:I58)*		*Non-cash income*	*=SUM(L55:L58)*		
55		Farm - crops			Farm - crops			Farm - crops			Farm - crops			
56		Farm - animals			Farm - animals			Farm - animals			Farm - animals			
57		Forest		=+C57/C54*100	Forest		=+F57/F54*100	Forest		=+I57/I54*100	Forest		=+L57/L54*100	
58		Other		=+C51+C57	Other		=+F51+F57	Other		=+I51+I57	Other		=+L51+L57	
59														
60		*Total*	*=+C48+C54*			*=+F54+F48*			*=+I54+I48*			*=+L54+L48*		

O	P	Q
% cash income	=AVERAGE(C3,F3,I3,L3,C18,F18,I18,L18,C33,F33,I33,L33,C48,F48,I48,L48)	
Percentage contribution to cash income		
Wealthy	=AVERAGE(J6,M6,J21,M21,J36,M36,J51,M51)	
Poor	=AVERAGE(D6,G6,D21,G21,D36,G36,D51,G51)	
Combined	=AVERAGE(D6,G6,J6,M6,D21,G21,J21,M21,D36,G36,J36,M36,D51,G51,J51,M51)	
Percentage contribution to non-cash income		
Wealthy	=AVERAGE(J12,M12,J27,M27,J42,M42,J57,M57)	
Poor	=AVERAGE(D12,G12,D27,G27,D42,G42,D57,G57)	
Combined	=AVERAGE(D12,G12,J12,M12,D27,G27,J27,M27,D42,G42,J42,M42,D57,G57,J57,M57)	
Percentage contribution to combined		
Wealthy	=AVERAGE(J13,M13,J28,M28,J43,M43,J58,M58)	
Poor	=AVERAGE(D13,G13,D28,G28,D43,G43,D58,G58)	
Combined	=AVERAGE(D13,G13,J13,M13,D28,G28,J28,M28,D43,G43,J43,M43,D58,G58,J58,M58)	
TOTALS		
Farm		**Ratio**
Subsistence total	=SUM(C10,F10,I10,L10,C25,F25,I25,L25,C40,F40,I40,L40,C55,F55,I55,L55)	
Cash total	=SUM(C4,F4,I4,L4,C19,F19,I19,L19,C34,F34,I34,L34,C49,F49,I49,L49)	=+P26/P27
Forest		
Subsistence total	=SUM(C12,F12,I12,L12,C27,F27,I27,L27,C42,F42,I42,L42,C57,F57,I57,L57)	
Cash total	=SUM(C6,F6,I6,L6,C21,F21,I21,L21,C36,F36,I36,L36,C51,F51,I51,L51)	=+P30/P31

ACRONYMS

APR	Annual Progress Report produced by governments in each year of PRS implementation
BAT	British American Tobacco
BUCODO	Budongo Forests Community Development Organization (Uganda)
CAS	Country Assistance Strategies (World Bank)
CFM	Community forest management
CFR	Central Forestry Reserves (Uganda)
CIFOR	Center for International Forestry Research
CSO	Civil society organization
ECOTRUST	The Environment Conservation Trust (Uganda)
FAO	Food and Agriculture Organization of the United Nations
FD	Forest Department
FRA	Forest Resource Assessment (conducted every five years by FAO)
HBS	Household Budget Survey
IDA	International Development Association
IFF	International Forum on Forests
IIED	International Institute for Environment and Development
IMF	International Monetary Fund
INGO	International Non-Governmental Organization
IPF	International Panel on Forests
I-PRSP	Interim PRSP
ITTO	International Timber Trade Organization
IUCN	International Union for Conservation of Nature
JSA	Joint Staff Assessments—documents produced by World Bank staff for reporting on the status of a country's current PRSP
LGMD	Local Government Monitoring Database
MAP	Madagascar Action Plan
MDGs	Millennium Development Goals
MKUKUTA	MKUKUTA (Mkakati wa Kukuza Uchumi na Kuondoa Umaskini Taifa) National Strategy for Growth and Reduction of Poverty of Tanzania
MTEF	Medium Term Expenditure Framework
NAADS	National Agricultural Advisory Services (Uganda)
NFA	National Forestry Authority
nfp	national forest program (nfp Facility located at FAO)
NGO	Non-Governmental Organization
NTFP	non-timber forest product
ODI	Overseas Development Institute
OECD	Organisation of Economic Cooperation and Development
PEN	Poverty Environment Network (CIFOR)
PMS	Poverty Monitoring System for PRS
PPA	Participatory Poverty Assessment
PRA	Participatory Rural Appraisal
PROFOR	World Bank Program on Forests
PRS	Poverty Reduction Strategy
PRSC	Poverty Reduction Support Credits
PRSP	Poverty Reduction Strategy Paper (or Process)
RECOFTC	Regional Community Forestry Training Center for Asia and the Pacific
SAPM	Le Système des Aires Protégées de Madagascar
SWAP	Sector-Wide Approach
TFAP	Tropical Forestry Action Plan
TFT	Tropical Forest Trust
TNC	The Nature Conservancy
UNCED	UN Conference on Environment and Development
UNFF	United Nations Forum on Forests
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature

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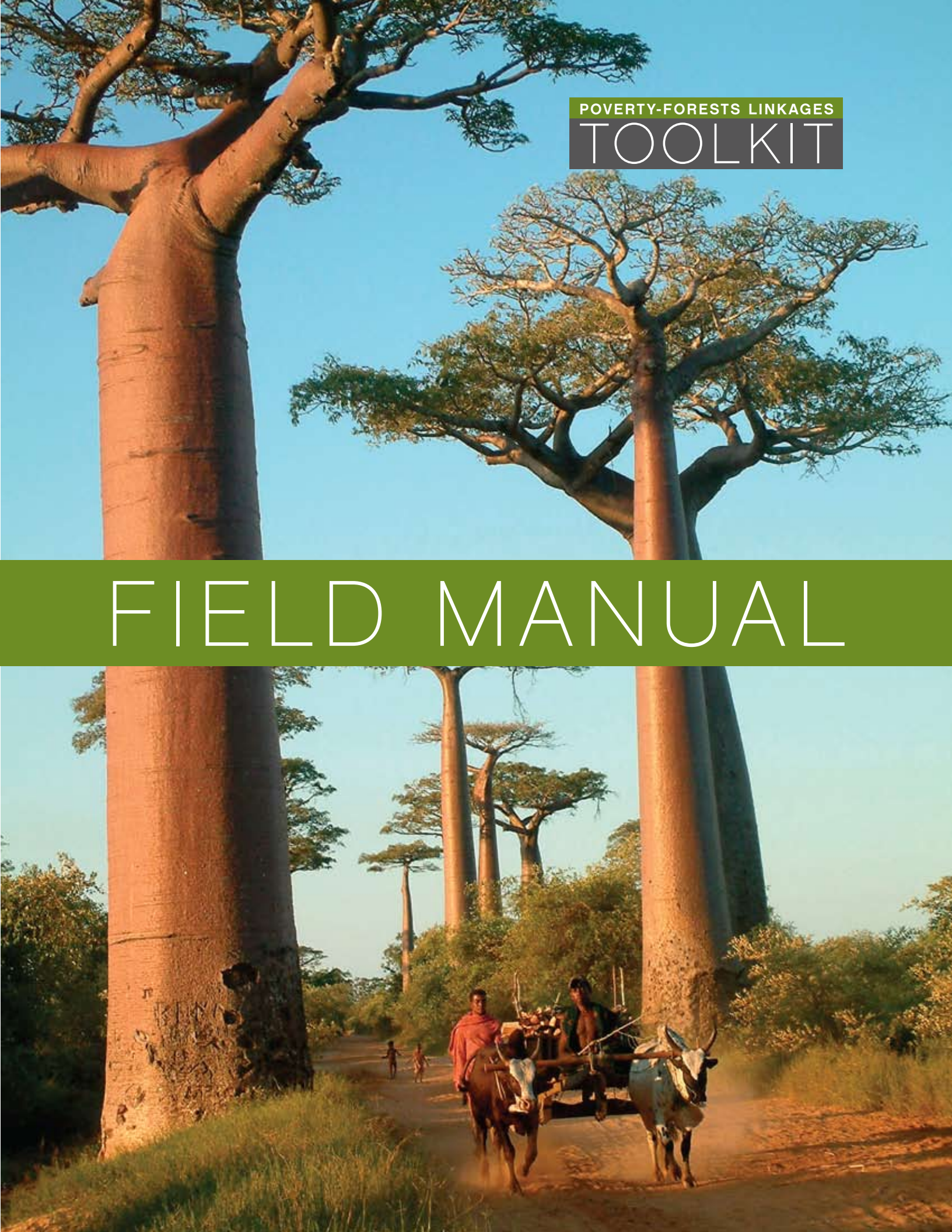

POVERTY-FORESTS LINKAGES

TOOLKIT

FIELD MANUAL

THE TWO PARTS OF THE PROFOR POVERTY-FORESTS LINKAGES TOOLKIT

The toolkit provides a framework, fieldwork methods and analytic tools to understand and communicate the contribution of forests to the incomes of rural households. It is presented in two parts.

PART 1

THE NATIONAL LEVEL

Purpose: Part 1 discusses and guides the networking and research that is needed at national level to understand and communicate the contribution of forest products to rural livelihoods.

Users: Part 1 is intended for the researchers, government officials, staff of national or international NGOs, or consultants who are involved in taking responsibility for the use of the Poverty-Forests Linkages Toolkit at national and local levels. Part 1 also provides the necessary foundation for building relationships and buy-in from decision makers in the audiences described above.

Content: Part 1 provides information on the overall use of the toolkit, an overview of Poverty Reduction Strategies and national forest programs, advice on how to link with key policy makers and officials, and guidance on how to make sure the toolkit fits appropriately into both the country's general poverty reduction process and into the forest sector's commitments and interests. It also suggests means of communicating the findings of Part 2 effectively at district and national levels.

PART 2

THE FIELD MANUAL

Purpose: Part 2 gives detailed guidance on carrying out fieldwork at village-level to assess the contribution of forest products to rural livelihoods.

Users: Part 2 is aimed at the groups gathering data in the field - NGOs, CSOs and local-level officials. It is adapted to local capacity and assumes that members of this audience will need initial training in the use of the toolkit in the field, but that they would be able to manage the process alone on a subsequent occasion.

Content: Part 2 gives suggestions for site selection, pre-field planning and organization of the field visits. It goes on to describe the field tools, with instructions for their use, providing all the charts needed together with examples illustrating the data they generate. There are full explanations of the purpose of each tool, the materials needed for each, and problems to look out for. The language and explanations have been made as simple and clear as possible.

Part 2 is designed so that it can be used as a free-standing manual for use in the field.

POVERTY-FORESTS LINKAGES

TOOLKIT

FIELD MANUAL

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ACRONYMS

APR	Annual Progress Report produced by governments in each year of PRS implementation
BAT	British American Tobacco
BUCODO	Budongo Forests Community Development Organization (Uganda)
CAS	Country Assistance Strategies (World Bank)
CFM	Community forest management
CFR	Central Forestry Reserves (Uganda)
CIFOR	Center for International Forestry Research
CSO	Civil society organization
ECOTRUST	The Environment Conservation Trust (Uganda)
FAO	Food and Agriculture Organization of the United Nations
FD	Forest Department
FRA	Forest Resource Assessment (conducted every five years by FAO)
HBS	Household Budget Survey
IDA	International Development Association
IFF	International Forum on Forests
IIED	International Institute for Environment and Development
IMF	International Monetary Fund
INGO	International Non-Governmental Organization
IPF	International Panel on Forests
I-PRSP	Interim PRSP
ITTO	International Timber Trade Organization
IUCN	International Union for Conservation of Nature
JSA	Joint Staff Assessments—documents produced by World Bank staff for reporting on the status of a country's current PRSP
LGMD	Local Government Monitoring Database
MDGs	Millennium Development Goals
MKUKUTA	MKUKUTA (Mkakati wa Kukuza Uchumi na Kuondoa Umaskini Taifa) National Strategy for Growth and Reduction of Poverty of Tanzania
MTEF	Medium Term Expenditure Framework
NAADS	National Agricultural Advisory Services (Uganda)
NFA	National Forestry Authority
nfp	national forest program (nfp Facility located at FAO)
NGO	Non-Governmental Organization
NTFP	non-timber forest product
ODI	Overseas Development Institute
PEN	Poverty Environment Network (CIFOR)
PMS	Poverty Monitoring System for PRS
PPA	Participatory Poverty Assessment
PRA	Participatory Rural Appraisal
PROFOR	World Bank Program on Forests
PRS	Poverty Reduction Strategy
PRSC	Poverty Reduction Support Credits
PRSP	Poverty Reduction Strategy Paper (or Process)
RECOFTC	Regional Community Forestry Training Center for Asia and the Pacific
TFT	Tropical Forest Trust
UNCED	UN Conference on Environment and Development
UNFF	United Nations Forum on Forests
WWF	World Wide Fund for Nature

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SECTION ONE

PRE-FIELD PLANNING

INTRODUCTION

This field manual will usually come into play once the national-level analysis explained in Section 2 of Part 1 is complete. Alternatively, a local organization may wish to use Part 2 of the toolkit for an independent analysis. Either way, this field manual is designed as a self-contained manual to guide all of the steps of the field exercise. Readers intending to apply the toolkit in the field should read the whole manual before beginning.

It cannot be stressed too strongly that data generated by these tools cannot directly be turned into questions for the government's existing data gathering process, but are used rather to highlight the need for additional questions in government data gathering, and to help frame the topics which they would need to cover. The purpose of the exercise is rather the building of a national picture made up of small-scale forest-focused PRAs from a variety of locations. Section 3 of Part 1 of this toolkit indicates how such a national picture can be compiled.

SELECTING FIELD LOCATIONS

The toolkit is intended as a first step in a process which could lead to better data collection by a Forestry Department, so that the real contribution of forests to the nation and its citizens can be better understood. It delivers local-level "snapshot data" on forest reliance and the livelihood and poverty reduction contribution of forests. This is the first qualitative step in a process intended to make the case of the importance of forests and so lead to the gathering of more quantitative data on the role of forests in the incomes of the poor in the future.

Field sites should be selected to provide policy makers with the best possible "snapshot" of poverty and forestry situations in their country. The recommended approach is to use purposive sampling to capture the range of conditions within the country. Purposive sampling (subjective selection of sites according to a set of selection criteria) means that the results of the toolkit will not show the whole of the national situation in the way that a fully randomized sample would. Instead, the toolkit will highlight particular issues that more formalized statistical exercises may need to include in future. If the research team does have sufficient resources available, then it is certainly possible to use a fully randomized sample of study sites, which will give a statistically robust assessment of average forest dependence across the country,

and of variation around this average, but this may not be possible in many countries where the toolkit is being used for the first time.

The recommended means to generate the selection criteria for the study sites is through discussion with both the ministry responsible for forests and with the Poverty Reduction Strategy (PRS) secretariat. They can provide information such as poverty and vegetation maps to guide site selection, as well as guidance on any criteria they regard as important for developing and implementing policy.

Criteria for site selection are likely to be: prevalence (and/or depth) of poverty, type of forest or ecosystem, and type of forest tenure. Other criteria may be added on the advice of the ministry responsible for forests and with the Poverty Reduction Strategy (PRS) secretariat. For example, the research team in Uganda was requested to sample within each of the four administrative divisions of the country in order to maximize credibility among national policy audiences.

The basic set of criteria—poverty, forest type, tenure—means that, if the data (census maps, vegetation maps, tenure/administration maps) are available, the study sites will be selected to include:

(i) sites in the poorest areas of the country
(ii) sites across a range of forest types
(iii) sites that differ in forest tenure

Criterion (i) speaks for itself. The poorest areas of the country are likely to be located far from the capital, with infrastructure and road networks below the national average in quality and availability. Many countries have up-to-date census data and poverty maps which can be used for choosing sites in the poorest parts of the country. The main challenge will be deciding on the best scale to use for site selection, and this should be discussed carefully with government staff responsible for national statistics. For example, some of the less poor districts of the country may include pockets of deep poverty and, if these are forest-dependent areas, it may be useful to sample them.

Criterion (ii) might be used to make a selection of two or more of the following: dense lowland forest, upland forest, coastal forest, dry forest, savanna, and degraded forest or peri-urban areas. Which types of forest are most relevant to rural livelihoods will depend on the country. In many countries, the contrast between moist and dry forest is the most important—while a greater range and volume of forest products may be collected in moist forest areas, people in dry forest areas may be just as dependent on forest resources in terms of the overall contribution to their income. Many countries have a system of forest classification, with readily available maps, that can be used for sampling.

Criterion (iii) is important because tenurial arrangements are critical for the contribution of forests to the livelihoods of the poor. In many countries there may be only one type of forest tenure applicable to all poor rural people. In large parts of Asia and Africa, land and forest resources are owned by the state, with local people

allowed access as determined by a mix of state regulations and traditional communal rights. Where there is no diversity in tenurial arrangements in a country, it may be possible to select a site near a protected area, a site where community or joint forest management is being practiced, or a site where forests are leased to concessionaires. It is suggested that, if resources allow, pairs of villages are interviewed in each location selected, one in a more accessible and one in a less accessible location, further from markets and main roads.

Again, it is important to emphasize that this purposive site selection will deliver toolkit results that are indicative rather than a full statistical picture of the country as a whole. When presenting the results, it may be helpful to present the toolkit findings alongside the findings of a formal national statistical survey (government census or household survey) to provide a context for the results and highlight site-specific findings.

HOW MANY SITES TO SELECT?

The aim of the toolkit exercise is the collection of information from different forest contexts, and their collation into an overview of the role that forests play in the cash and non-cash incomes of the poor in the country as a whole. The series of snapshots generated is intended to create an interest in capturing forest and poverty data more effectively in due course, and to serve as a basis for more detailed research.

How many sites are needed for such an enterprise? Three sites might be quite adequate for a relatively homogeneous country such as Gabon. Ten could suffice in Tanzania, with careful selection. However, in the case of an enormous country such as Indonesia, several for each of Java, Sumatra, Kalimantan, Sulawesi, and Indonesian Papua would be required, without even considering other areas of Eastern Indonesia. In this case, selection of only certain regions (or islands) would probably be the best way forward.

Including a pair of villages at each study site allows for more efficient use of field research resources, and allows for interesting comparisons at the local level, such as between villages that are more and less isolated from roads and services, or nearer to and further from a protected forest.

MAKING INITIAL CONTACT WITH DISTRICT LEVEL OFFICIALS

A preliminary task is to contact district officials by telephone, email or through official channels to introduce relevant officials to the toolkit and the reasons for undertaking field exercises in the district. Relevant officials will certainly include, at a minimum, those concerned with natural resources and planning, together with courtesy calls on more senior officials. It may be necessary to explain the country's Poverty Reduction Strategy, and it will almost certainly be necessary to explain why the contribution of forests to cash and non-cash incomes is often overlooked and needs further investigation.

A very short, simple document (no more than two pages) should be prepared for distribution to local officials, which explains PRSPs, forests and their contribution to rural incomes, the proposed toolkit exercises and their purpose. Annex 1 provides an example of such a document.

SECTION TWO

THE FIELD VISITS

TIMELINE FOR THE FIELD VISITS

The field team needs to make time for the following activities at each field site:

- Meeting and working with district officials
- Meeting and working with village leaders and villagers
- Organizing and training facilitators (if the decision has been made to use a different team of facilitators at each site)
- Implementing the field tools that require working with a small group of village leaders and villagers (Tools 1 and 2)
- Selecting and making contact with the 40 participants who will be involved in the remaining field tools

Visit	Estimated time	Activity	Who is involved?
Reconnaissance visit (up to 8 days)	variable	Meeting with and working with district officials (repeated meetings throughout the visit) Meeting and working with village leaders and villagers (repeated meetings and organization of practical logistics)	Field team, district officials, village leaders
	3 days	Organizing and training facilitators	Field team + local facilitators
	½ day	Preparing charts and materials	Field team
	1 day	Tool 1	Field team + village leaders
	½ day	Tool 2	Field team + small group of villagers
	1 day	Making contact with 40 participants	Field team
Return visit (up to 5 days)	½ day	Tool 3	Field team + group of 40 villagers
	1-1½ days	Tool 4	Field team + group of 40 villagers
	½ day	Tool 5	Field team + group of 40 villagers
	1 day	Analyses and preparation of presentation	Field team
	1 day	Presentation of results at village level and district level	Field team + invitations to all villagers and to district officials[1]

1 If culturally and politically appropriate, it is a good idea to present the results at one meeting to which both the village and district officials are invited. If this is sensitive for any reason, then the results can be presented separately to the district officials.

- Implementing the field tools that involve the 40 participants (Tools 3, 4 and 5)
- Doing analyses and preparing presentations for the village and district level
- Presenting the results at the village and district level

These activities could be combined into a single trip to the site, but it may make more sense to divide the activities between a reconnaissance visit (covering all preparatory activities and Tools 1 and 2) and a return visit (covering Tools 3-5 and the presentations of the toolkit results at village and district levels). The decision on the number of visits and the length of each visit will obviously depend on a number of factors including the season (rainy or dry), important events (e.g. national or local elections), and competing demands on time for villagers, district officials and the field team (e.g. harvest and planting seasons, the financial year). The table below gives a rough guide to the amount of time needed for the various field activities and a suggested split into a reconnaissance and return visit.

ORGANIZING AND TRAINING FACILITATORS

Field exercises demand a facilitator for each group, and at least one supervisory team facilitator, who moves among groups to make sure that the tools are being applied properly, particularly if group facilitators are new to the task. This means that five facilitators are required for one village exercise. These five facilitators will need to make the following time commitments to carry out the field work in one village: to train for one to three days, to facilitate the tools with villagers for three to five days, to put extra time aside if necessary for analysis and preparation of outputs and to attend the village-level and/or district-level plenary at which the tools are presented. In addition, on completion of the field work time must be set aside so that the village report can be written up. It is best to do this immediately after the field work, whilst the lessons learned are well remembered.

Selection of facilitators requires care. Only people with some experience in PRA methods can administer the toolkit properly. Overall, PRA experience and "people skills" are more important qualities for field team selection than numerical and analytic skills. Some local knowledge within the group of facilitators is also important, with knowledge of the local language and local politics being more important than knowledge of the local ecology and livelihoods. Sometimes it might make sense to choose facilitators that villages will feel more relaxed with because of their gender, age or ethnicity (e.g. groups of poor rural women often feel more comfortable being facilitated by an older man rather than by a younger man or woman).

If a number of sites around the country are to be covered in the field work, there are two options for choosing facilitators. The first option is a single team that goes to all of the sites. The advantages are that only one training session is needed, and that choosing skilled facilitators will produce consistent results, while the disadvantages are that a considerable time commitment is required from each facilitator, and there may be problems with local knowledge and local language. The second option is different teams for each site, with an opposite set of advantages and disadvantages.

The best approach to selecting and training the team depends on the country circumstances. In the testing of the toolkit, the Uganda team used the same facilitators at all sites, taking advantage of their consistently strong skills. The Cameroon team, on the other hand, used two different sets of field facilitators to deal with language differences in different parts of the country. The Madagascar team used a group of ten facilitators, with two groups of five working in two nearby villages at the same time, and meeting up in the evenings to discuss progress; the two villages came together for a shared plenary presentation at the end of the week.

The facilitators and government official who are going to observe or take part in the exercise, and the superviso-

ry facilitator(s) should spend one to three days in training before the field exercise, depending on their level of experience with PRA techniques. Training should include the following components:

- Understanding the purpose of the overall toolkit and of each tool
- Going through the steps of the tool, discussing any issues of content or of facilitation that might arise for each
- Drawing the charts and understanding how they are to be filled in
- Clarifying any issues of language, such as the most appropriate translations of terminology in the toolkit into the local language
- Deciding on shared definitions of forest products among all facilitators (including deciding whether and how these should fit with any definitions in national policy; e.g. can fish be a forest product?)
- Directly practicing each of the tools, through run-throughs and role-plays, including practice in using the charts and doing the calculations
- Agreeing practical logistics, such as the materials needed for each day, the timing of breaks and lunch, and so on.

An example of a country level training exercise is described in Annex 2.

WORKING WITH DISTRICT OFFICIALS

The first contact at the district level will be with the district officials with whom initial contact has already been made (see Section 1.4). The district level is likely to be a key level of decision-making and hence an important proponent in the implementation of the toolkit and the uptake of its results. The field team should aim to collaborate closely with district officials and help them get the best possible information from the toolkit implementation in their area to inform their policy decisions and their communications with national levels of government. District officials can help in turn with introductions, advice on field sites, and local information such as maps, surveys and policy documents.

In terms of information gathering, the first task is to ask for any background data available at the district level such as maps, copies of previous forest or poverty-related surveys, project documentation and regular data recording exercises (e.g. logs of forest law infringements). Local population and per capita income figures should be sought, along with any other data available on the distribution and nature of poverty in the district.

The second task is to arrive at an understanding of the role of district level government with regards to the national level. This will depend in part on whether or not decentralization has taken place. In many countries, the district/provincial level is now critical in implementing policies and taking responsibility for the management of resources. This makes the district/provincial level personnel's task more complex, as they need to understand local people's needs and priorities, to interpret national policies to them, and to develop working plans and activities that take account of both.

For this analysis, it is necessary to understand:

- which decisions can be taken locally and which must be referred upward;
- what data is collected and used locally, and what is collected to be sent to the national level;
- the data currently collected, particularly on the forest/natural resources/agricultural sectors and on poverty and/or household incomes;
- the annual budgeting and planning timetable which dictates when data is collected, when it is collated, and when it is forwarded to the national level; and
- to which ministry or other body at the national level the data is sent.

The next steps are to:

- obtain copies of the forms which are used for sector data collection;
- interview one or two of the data gatherers who complete forms at sub-district level;
- interview at least one of the data collators at the district level, who compile the reports that are sent to the national level;
- develop an understanding of the local use (if any) of the data for planning or monitoring purposes; and
- if a computer program is used for this purpose, find out what the program is and how it is being used.

The third task is to understand the relationship the district government has to the inhabitants. Are there further government levels (sub-district, ward, and village) that have a more direct understanding of local conditions than do district level officials? What is the protocol for making contact with them? How and how often do they report to the district level?

With these preliminary enquiries out of the way, the fourth task is to discuss with district officials[2] and others an appropriate location for the application of the toolkit. Through consultation, it should be possible to pick areas:

- with some forest cover,
- not too near to district headquarters,
- with infrastructure and road networks probably below average in quality and availability for the area, and
- with a high incidence of poverty.

If there is an intermediary institution such as an NGO or project to facilitate access to villages in particular areas, this factor might be important in making a final selection. It will be necessary to make contact with the local officials below the district level who have responsibility for the immediate area where the toolkit exercise will be conducted. If possible, a forestry official or some other official from this bottom level should participate in the toolkit exercise.[3]

WORKING WITH VILLAGE LEADERS

When district level enquiries and pre-planning and training are complete, the team is ready to make a preliminary visit to the village selected, to meet village officials, and to explain the process which will be followed. An intermediary will be needed to introduce the toolkit team to the village authorities: a district level official, or a leader of an NGO or a project known to village leaders.

The team needs to explain to village leaders the purpose of the toolkit, the tools to be used, and what will be asked of different sets of villagers: the leaders, the village as a whole, and the 40 participants selected for Tools 3-5. A timetable can then be arranged to fit with village commitments and activities (there will probably be a reluctance to take part in toolkit activities on market days, or on days normally allocated to church or mosque, for instance). The 40 participants will need to be able to spare about three days for Tools 3-5, either in a single block or broken up to fit into their schedules.

Explanations need to be made about the national level PRS process: what it is for, and how it is intended that the activities undertaken in the village will be made use

2 Several of the reviewers of this toolkit have warned of the bias which may creep in as a result of too close an association with local officials. It is our view, however, that the toolkit is at all points a training and capacity building exercise, not a research exercise. In that light, it is important to work through the criteria for village selection with local officials, and help them to understand the logic of the choices finally made – choices which hopefully they have contributed to.

3 If intermediaries (NGOs, researchers) helping with the application of the toolkit as facilitators advise that villagers will feel unable to speak up about local problems in front of even very junior officials, the answer is to invite such officials on the first day of the exercise only. Thus, it is best to not invite officials to the days when tools generate a discussion of problems and solutions. Where possible, though, it is better if bottom-rung forest officers, in particular, can be present to learn and to gain insight into the complexities of local problems.

of at the national level. It should be clearly pointed out that the toolkit exercise will not lead to direct benefits for the village. Nor is it the preliminary stage of a project.

Since it will not lead to direct benefits, it is essential to compensate villagers for their time. One way of doing so is to provide participants with food during the exercise. Providing, for example, "luxury" foods from town (rice, cold drinks) and paying for the slaughter of animals for roasting, usually works well. Field teams may consider compensating the 40 participants directly for their time or transport costs—the ethics and practicalities of this will be very much site-dependent. All these issues need to be planned with the village leaders.

WORKING WITH THE GROUP OF 40 PARTICIPANTS

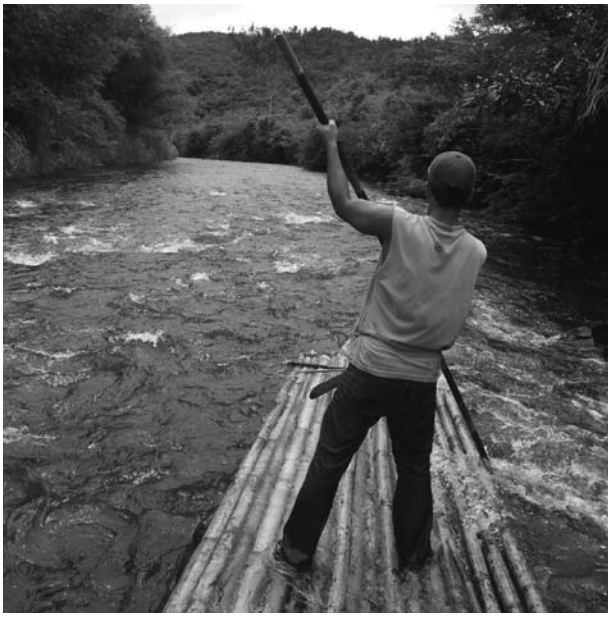
Start the work with the 40 participants at a short plenary, on the first day, before breaking into groups. Use this meeting to make introductions, to explain the purpose of the exercise, to give an estimate of how long the exercises will take each day, and to agree practical details regarding where each group will sit, and arrangements for meals and refreshments. Give plenty of time for participants to air any questions and concerns. Bigger issues, such as whether and how participants' costs will be compensated, the total number of days the participants will need to attend and the spread of these commitments to best fit with their other activities should have already been negotiated in advance during the reconnaissance visit.

Each day, several of the tools will be completed. It is courteous to have a short plenary each morning, to present key findings from the day before, before beginning on the new tools of the day. The final plenary has a similar purpose. A filled-in copy of all the tools sheets and charts should be given to the village, so that villagers can, if they wish, display them in the village headquarters.

Villagers may start off rather shy, needing help and prompting to give their responses. This may be particularly true of women's groups, and it is often best to put the most experienced, and possibly the older facilitators with women's groups.

How concepts are explained in the local language is a major determinant of the outcomes and success of the toolkit—so it is worth dedicating time during training to choosing good translations for key concepts. The Cameroon team took time during training to translate key vocabulary and concepts in the local language Pidgin. The Madagascar team undertook a similar exercise, into Malagasy (attentive to the local dialect of Malagasy at the two sites) and prepared all of the charts in Malagasy. In Ghana, all discussions took place in the local language (Twi), with reporting in English. This proved acceptable to villagers who although they were bilingual felt more comfortable speaking in their own language.

If there will be a language problem (this may be a problem when women do not speak an intermediary language) it is important to make sure that facilitators



selected speak the local language and are given necessary training to address this. There may well be a literacy problem in some groups. In this case, facilitators need to keep reading out the contents of lists made, and to keep repeating instructions, so that group participants remain fully in control of what is required of them. It is important not to rush the tools.

RATIONALE FOR THE FIELD METHODOLOGY

Summarizing the World Bank Participation Sourcebook, participatory rural appraisal (PRA) is a label given to a growing family of participatory approaches and methods that emphasize local knowledge and enable local people to make their own appraisal, analysis, and plans. PRA uses group animation and exercises to facilitate information sharing, analysis, and action among stakeholders. Although originally developed for use in rural areas, PRA has been employed successfully in a variety of settings. The purpose of PRA is to enable development practitioners, government officials, and local people to work together to plan context-appropriate programs.[4]

The method described in the toolkit attempts to combine the rich data often associated with informal focus group[5] discussion, with some of the two-way, transparent and visual qualities of PRA. At the same time it refines the quality of the data usually gathered under both these methods.

- Careful grouping (usually by wealth level and gender, but see below) creates small focus groups with 10 participants in each, plus a facilitator.
- Facilitation of true focus group discussion is a skilled activity, and many individuals find it difficult. This is in part why PRA-type methods have become so popular over the years—they are straightforward for the interviewer as well as the interviewee. For that reason, the work proposed here has been simplified in various ways.
- Facilitators find the exercises easy to conduct because:
  - Information is captured on pre-prepared charts;
  - Although they are instructed to prompt if information is not forthcoming, facilitators do not have to sort long informal conversations into key topics. The charts—and the ranking exercises that group members use them for—do the work for them; and
  - All group participants can make their opinion count, without the facilitators having to bring them in informally.
- Participants find the exercises more enjoyable than household questionnaires or focus group discussions because:
  - Even though the activity takes place as a group, everyone gets a series of chances to relay their personal views, through voting.
  - Voting keeps participants more engaged than discussion alone, and creates a feeling of progress as a series of definite steps are completed.
  - Voting gives them a chance to see what their peers think, without waiting for verbal consensus.
  - The method is faster—and much more democratic—than the reaching of consensus within the focus group.

4 For further details, please refer to the following website: http://www.worldbank.org/wbi/sourcebook/sba104.htm

5 Focus group discussions involve group interviews or discussions in which participants are selected because of shared interests or characteristics (e.g. poor women, wealthy farmers, NTFP collectors).

SECTION THREE

THE FIELD TOOLS

To recap, the fundamental objectives for using these tools are:

- to understand the contribution of forests and trees to rural cash and non-cash incomes in this area.
- to identify key constraints to and opportunities for increasing local benefits under current forestry policies and practices.
- to gather information for the national level that will enable the ministry responsible for forests to see how to address poverty more effectively, to contribute to the achievement of the Millennium Development Goals and to participate in the PRS process.

There are eight field tools in total. Some of these are participatory tools, to be undertaken with a small group of village-level informants or within the group of 40 participants, while others are tools for analysis and communication, to be undertaken by the facilitators on their own during the evenings or after the field visit. The table below summarises these characteristics.

For each of the tools, the text gives the main aim, the steps for undertaking that tool, the key questions that need to be asked, the equipment needed, and one or more worked examples.

Tool number	Tool name	Participatory or analytical/ communication?	Who is involved?
1	Wealth ranking	Participatory	Village leaders + facilitators
2	Landscape analysis	Participatory	Small group of village informants + facilitators
3	Timeline and trends	Participatory	40 villagers + facilitators
4 Step 1	Livelihood analysis	Participatory	40 villagers + facilitators
4 Step 2		Participatory	40 villagers + facilitators
4 Step 3		Participatory	40 villagers + facilitators
4 Step 4		Analytical	Facilitators alone
5	Problem and solution matrix	Participatory	40 villagers + facilitators
6	Ranking forest products	Analytical	Facilitators alone
7	MDG chart	Analytical	Facilitators alone
8	Monetary values	Analytical	Facilitators alone

SECTION FOUR

PRESENTING THE RESULTS AT LOCAL LEVEL

The final activity at the site level is to present the results to the whole village and to district officials. Ideally, this can be done in one joint session, inviting the whole village along with district officials to a presentation of results in the village. If possible, the presentation can be made into a special event, providing a meal and thanks for the village. This should take about half a day, but with considerable preparation and follow-up involved.

The field team should present the results of the toolkit clearly and simply—noting that not all of the Tools need to be presented (see below) and using visual techniques as far as possible. The team should allow plenty of time for comments and discussion among the villagers. Short responses from district officials will likely be part of the presentation too—but the field team should be careful to make sure that the session is about the toolkit and the villagers' viewpoints rather than being co-opted by district officials into a series of political speeches or lectures.

To conclude, thank villagers for their time and explain again how the information is going to be used at higher levels. Make sure, too, when clean copies of the charts are redrawn, that the village has a set to keep for their own use. Also, make sure that both the village and the district officials are sent copies of site-level and/or district-level reports.

TOOL RESULTS WHICH NEED TO BE PRESENTED IN THE VILLAGE-LEVEL OR DISTRICT-LEVEL PLENARY

TOOL 3 (TIMELINE AND TRENDS) Major trends are well worth highlighting. In the Indonesian Papua example given, the women's analysis of mounting agricultural problems arising from the absence of teenage sons at school, a major resulting labor shortage and the need for paid laborers, came as news to the men, to our surprise. Women were working harder and harder to try to deal with difficulties, but men had seemingly not put together the component parts of the problem before.

TOOL 4 (LIVELIHOODS, STEPS 1, 2 AND 3) Findings can be presented as large pie charts, demonstrating the extent of forest dependence.

TOOL 5 (FOREST PROBLEM AND SOLUTION MATRIX) identifies and sorts out problems and solutions into an agenda for action for villagers, as well as providing insight to the toolkit team. It is thus well worth presenting to the village at this stage.

TOOL RESULTS WHICH DO NOT NEED TO BE PRESENTED IN THE PLENARY

TOOLS 1 (RANKING) AND 2 (LANDSCAPE SITUATION ANALYSIS) are irrelevant to this plenary, of course. The data was collected for the use of the toolkit team, not the villagers.

TOOL 7 (MDG CHART) is for presentation elsewhere.

TOOL 6 (RANKING TREE AND FOREST PRODUCTS) While this tool highlights forest products important for analysis, it contains no surprises for villagers and need not be presented.

ANNEX ONE

'THE POVERTY-FORESTS TOOLKIT—SHOWING WHAT FORESTS MEAN TO THE POOR'

A short document for translation and distribution to government officials and others, when explaining the purpose of the toolkit

Forests' contribution to rural households is widely recognized, but not well understood. There is little knowledge about how rural households depend on forest and tree resources to meet their daily needs, and even less about the potential of this resource to reduce poverty. Forests products, especially non-timber forest products, are often overlooked in the data collection activities of forestry and agricultural agencies so that their importance to households is under-estimated.

The toolkit is designed to address the problem by providing a framework for gathering and analyzing data that can offer a clearer understanding of the role of forest and tree products in poverty reduction. It addresses social, institutional and environmental concerns in the context of local and national planning processes; and is able to identify the most forest-dependent and the impact on them of forest policies and programs.

Directed primarily towards non-specialists with relatively little experience in data collection or poverty/forest linkages, the toolkit's approach streamlines information gathering, identifies priority areas and helps define minimum information requirements. The results are made accessible through the use of indicators that are easily understood by local people and decision makers alike. The toolkit is designed to be used by the staff of forestry agencies, local government and/or NGOs, together with community members, to gather and analyze information.

POVERTY-FORESTS TOOLKIT FRAMEWORK—A STEP-BY-STEP PROCESS

The Poverty-Forests Toolkit framework uses a series of tools that have been adapted to achieve specific results. The initial phase is diagnostic, consisting of data gathering to identify forest/household use linkages and priorities for decision makers. The second phase presents the findings for discussion, planning and future monitoring at the district level. The third phase involves identifying ways of incorporating the results in national level poverty reduction strategy processes. The box below provides an indication of activities during each phase.

THE POVERTY-FORESTS TOOLKIT FRAMEWORK

PHASE 1: NATIONAL LEVEL ANALYSIS

Identify (i) data available related to the dependence of poor people on forests, and impediments to their advancement out of poverty, in the contexts of the PRSP, nfp and other frameworks; (ii) data currently collected; (iii) criteria for field site selection.

PHASE 2: LOCAL SITUATION ASSESSMENT

Identify (i) the users of forest resources; (ii) their level of dependency on forests/ tree products; (iii) existing resources and products; (iv) key constraints in the existing system (access, policy, market system). Prepare the results.

PHASE 3: PRESENTING INFORMATION (PRIORITIES) AT HIGHER LEVELS

(i) Discuss and reframe data at district level with the assistance of local officials, to fit with district-to-national reporting requirements; (ii) at national level streamline data further to fit with formats needed for the PRS process, the nfp process, and others as relevant.

ANNEX TWO

EXAMPLE OF A TRAINING PROGRAM FOR TOOLKIT FACILITATORS: GHANA

INTRODUCTION

The training of the national research team took place over a two day period, 9th-10th July 2007. It was carried out in a classroom venue in Kumasi, Ashanti Region, where all the participants met and worked through the toolkit documentation.

KUMASI CLASSROOM TRAINING

Two days were spent familiarizing the research group with the documentation of the toolkit. This proved to be time well spent, as it meant all the participants were familiar with all the tools before going into the field. There were 14 participants in total. In addition to the four members of the country team, three participants came from the national forest service, three from national NGOs, and three from the Akropong community where the training exercise was to be carried out, together with one academic (a member of the national university where natural resource courses are taught). This provided a good mix of relevant skills and experiences. Of this total, five were funded by IUCN and eight would form the national research team for the project.

Monday, 9th July am

Introduction and overview of research project
Poverty Mapping
Introduction to the toolkit manual

Monday, 9th July pm

Description of all tools 1-3
Description of tool 6

Points raised:

It is important to have clarity on the objectives of the toolkit. As stated in the toolkit, there are three main objectives:

- To understand the contribution of forests and trees to rural cash and non-cash incomes in the area studied.
- To identify key constraints to and opportunities for increasing local benefits under current forestry policies and practices.
- To gather information for the national level that will enable the ministry responsible for forests to see how to address poverty more effectively, to contribute to the achievement of the Millennium Development Goals, and to participate in the PRSP process.

Wealth ranking tool (to be carried out with village authority): there is ambiguity in defining a household in Ghana. This needs to correspond with the family unit, based on those 'who eat from the same pot'.

Local landscape situation analysis (carried out with selected villagers): it was suggested that it might be useful to prepare a sketch map prior to going on the walk, based on villagers' descriptions. The value of different groups, e.g. a man's group and a women's group, was noted.

Timelines and trends (carried out with all groups together): when to begin in time and what themes to follow needs to be locally determined—facilitators should be wary of imposing their own views. In completing the timeline the effects of the themes on the poverty-forestry relationship should be explored.

User rights and duties (not clear with whom to carry this out): the difficulty of scoring was discussed and it was agreed that there is a need to emphasize that what is being scored are how rights are exercised in practice and not what is meant to happen.

Tuesday, 10th July am

Review of day 1
Description of Tool 4

Points raised:

- Definition issues: there is need for clarity on what is or is not a 'forest product'.
- Boundary cleaning, and other forest-based activities, should be categorized under 'other sources of cash'; but recognized as income derived from the forest
- The selection of areas where the research is undertaken will influence how to deal with legality issues. There is a need to rely on local community leaders to help address this difficult issue. Care is required in how the research is presented to local communities to minimise the impact of illegal activities on the research analysis.
- There was concern over how to carry out the categorization of individual forest products (e.g. medicinal plants and individually named plants).
- The importance of putting a financial figure on the final statistic was raised.

Tuesday, 10th July pm

Group work to complete Tool 4: three groups of four people each worked through the application of tool 4.
Description of evaluation approach.

Points raised:

Should national resources be devoted to the development of this toolkit? An interesting discussion took place on whether the toolkit is valuable in terms of bringing out the contribution of forestry to rural livelihoods. It was suggested that the toolkit might be applied in other sectors and individual tools may be used in other circumstances, e.g. wealth ranking might be used to identify the differing income backgrounds of school children. However, there was some scepticism raised on the 'added value' of the toolkit over other PRA tools. Much information has been collected already, but the information is not given priority at the policy level. One challenge in the development of the toolkit project was to make these linkages more effective than in previous research attempts.

FOR MORE INFO ON THIS TOOLKIT OR OTHER PROFOR ACTIVITIES, GO TO **WWW.PROFOR.INFO**

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TOOL 1

WEALTH RANKING

CONDUCTED WITH THE VILLAGE LEADERSHIP

AIM: TO SELECT PARTICIPANTS WHO ARE REPRESENTATIVE OF THE LOCAL POPULATION FOR THE TOOLKIT EXERCISES

In order to understand how poor households use and are dependent on forest resources, it is important that they can be readily identified for interviews. But since the activities of average and wealthy households also have an impact on both the access of the poor to forest resources and on the use of forest resources by the community, it is important to be able to identify not only the poor, but other households as well.

"Wealth ranking"[1] is firstly a tool to discuss the attributes of "rich", "average", "poor" and "very poor" people in the selected area, and then to rank all the households in the area against these criteria, into the categories selected. Since wealth ranking takes several hours, and only involves a small subset of villagers (usually village leaders, and sub-village heads who know the households they are responsible for, and their wealth levels, pretty well) this is essentially a pre-tool that needs to be undertaken a day or two before the main exercise. This gives time for leaders to locate the household representatives who will be selected, to make sure they are able to come on the chosen day, or to find a same category substitute.

However, wealth is a contentious issue and—especially as this is the first tool—a lot of care and sensitivity is needed to get it right. Experience during the development of the toolkit included the Cameroon team's use of the terms "long fingers" and "short fingers" as acceptable local synonyms for "wealthy" and "poor". The Ghana team avoided the terms "rich" and "poor" by talking about "house owners", "coffee farmers", "seasonal crop farmers" and "landless/ jobless". The Madagascar team used the terms "rich" and "poor" only with a small group of elders for Tool 1 but in the sessions and plenary report-back labeled the groups A, B, C, D (although people could obviously see the differences among the groups for themselves, these labels avoided embarrassment). The Uganda team succeeded in the wealth ranking by explaining first that the purpose of the ranking was to avoid the usual bias towards wealthy men.

STEP 1

LOCAL DEFINITIONS OF "EXTREME POVERTY", "POVERTY", "AVERAGE" AND "WEALTHY".

The team begins by identifying what criteria are commonly used in the area to classify a household as being in one of these categories. The objective is to identify three or four key indicators or criteria for each on which there is agreement among informants that adequately define the broad economic categories. Key informants include community leaders as well as households.

Materials needed: **Flip charts, blank walls or a display area to pin or stick them up where they can be seen, marker pens.**

Criteria may include the number of months a year that a household can normally grow its own food, the numbers of animals it owns, the amount of land it holds, the

1 In Indonesian Papua, where mention of the wealth or poverty of individuals was deemed to be unacceptable, discussion with the intermediary NGO led to the choice of 'old' and 'young' as the proxies for male 'wealth' and 'poverty'. Women constituted a third, undifferentiated group in this location. While reviewers have suggested other location-specific criteria which might be considered as well (ethnicity, caste, etc.), it is our view that the guiding principle should be the capacity to make a contribution to the PRS processes. For that, some attempt to identify the rich, poor and very poor, by whatever appropriate local means, is essential.

materials out of which the house is built, and the valuables it is known to own (such as a plough, a bicycle, a cart, a tractor or other vehicle). Being old and alone and living on the charity of non-relatives may be a sign of extreme poverty.

In Tanzania, animal ownership and numbers owned, together with the amount of land held, were the key criteria. Costly housing materials and consumer durables were not regarded as very important.

STEP 2

WHICH HOUSEHOLDS?

After the criteria are agreed upon, a sample frame is needed to generate a complete list of all households. This information may come from the village register, or it may be accessible by simply obtaining a listing from each sub-village head of the households in his/ her quarter of the village. A technique that enables a quick ranking is to put the names of each household onto a card or piece of paper. The village committee then uses the criteria already generated to sort the cards into tins, boxes or baskets which represent the four categories selected.

Materials needed: **Small index cards and marker pens; four big tins, boxes or baskets for sorting into.**

The first sorting provides a snapshot of the village when cards are counted and the number of households in each category is identified. The "poor" and "very poor" categories will probably encompass the bulk of the village.

STEP 3

SELECTING HOUSEHOLDS TO INTERVIEW.

The team then selects 40 households to request to provide a male or female adult household member to participate in Tools 3, 4 and 5. Given the short time of the field assessment, only a relatively small number of households can be sampled, and by selecting relatively homogeneous groups to go through the subsequent tools together may be the least time-consuming way to work.

The team needs to select:

- a wealthy/average male group drawing five names from each category - 10 in all
- a wealthy/average female[2] group drawing five names from each category - 10 in all
- a poor/very poor male group drawing five names from each category - 10 in all
- a poor/very poor female group drawing five names from each category - 10 in all

The aim should be to select the 10 households randomly from each category, to avoid biases that come in if the choice is made deliberately. However, there will be some limitations to random sampling, such as availability of household members for the period of time needed to undertake the tools. The 40 participants will need to be able to spare about three days for Tools 3-5, either in a single block or broken up to fit into their schedules.

2 The females selected for the two female groups do not need necessarily to be from female-headed households (though some will be). This is a rough and ready exercise and there is no one correct way to conduct the toolkit exercises.

EXAMPLE OF WEALTH INDICATORS FROM NYANTONZI PARISH, MASINDI DISTRICT, UGANDA

indicator	Land ownership	Land size	Livestock	Ownership of other assets	Quality of housing	Source of income	Education	Source of livelihood (non- cash)	Social behaviour
Very poor household	Individuals may have no land. They may have land but do not work. (lazy)	0.25 acre.	They have no livestock. Those who may have sell off immediately.	No assets.	Small grass huts with walls made of grass and no doors. No latrines too.	Income is obtained from casual labour and stealing.	Have never been to school.	They work for food, beg or steal.	They have small families, unstable and tend to migrate to avoid being held account-able for bad practices e.g. stealing
Poor household	May have land i.e. inherited.	At least 2 acres.	May have land, and own about 1-5 goats, chicken and a pig.	May have a bicycle, small radio and a disco watch.	The houses are usually of mud and grass thatch, well maintained with a kitchen and latrine.	Income comes from sale of ag-ricultural prod-ucts, casual labor, renting out land and sale of livestock and crafts.	May have studied up to primary level.	Grow own food crops.	Usually have big families and store cereals.
Average Wealthy household	Own land (inherited), buy land and may grab land.	8-15 acres of land.	May have between 10-15 chickens, 7-10 goats, 3 pigs and 2 ducks with dogs to protect them.	May own a good looking bicycle, fam-ily motorcycle, grinding mill, radio cassette and a mobile phone.	Houses usually of mud walls but roofed with iron sheets have a grass-thatched kitchen and latrine.	Income comes from sale of puppies and livestock, sale of agricultural products (from own farm or bought), sug-arcane selling (out growers) and milling.	May have gone through secondary level education although could be rich without education.	Have got many opportunities	Boastful, “Ebin-tu biruho”
Wealthy household	Own land by lease, buying or grabbing.	15 acres and more.	May have about 30 local chicken 15-20 goats, 5 pigs, 5 ducks, 2 tur-keys, 2 dogs, 8 sheep and between 20-25 cattle.	May own grind-ing mill, televi-sion, radio cassette and a phone.	Brick walled and iron roofed houses, kitchens and latrines.	Rent out their buildings, sell sugarcane (out growers), and sell livestock. They also get income from milling.	May have gone through post secondary education.	Have many op-portunities	Boastful, “Ebintu biruho muno, nkutere nkugure”

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TOOL 2

LANDSCAPE ANALYSIS

TOOLKIT TEAM PLUS SELECTED VILLAGERS

AIM: TO UNDERSTAND THE WAY IN WHICH LOCAL RESOURCES ARE USED BY MEMBERS OF THE VILLAGE

This tool is primarily for learning by the field team rather than for shared learning among village participants. It is important for the field team to observe the kinds of resources that exist in the area, in the company of people who live there and who understand how the landscape is being used. A map may be available to work with. If not, a sketch map or a series of landscape sketches can be made as the visits proceed.

Materials needed: **Notebooks and pens. Large flipchart sheet to record information upon return to the village from the landscape exercise.**

A traditional transect cuts through an area in a straight line and provides an idea of the diverse resources and land use in an area. However, it is more useful to visit the different kinds of resources which local people draw upon, and which they suggest. In that way, a landscape analysis of forest and agricultural land use can be made. A straight line transect is not always able to capture all this.

Similarly, if time is available, it is more useful to do two landscape analyses, one with a men's group and one with a women's group, since their reasons for drawing on natural resources are different.

Team member(s) accompanied by local informants walk the area and ask questions relevant to it. These walks also provide good opportunities for village members to discuss problems of forest use, resource use norms and conflicts, etc.

Tool 2 is an informal tool to get a sense of the way in which local people use the landscape, and the rules they apply to it (or that others apply to it). It is invariably an

KEY QUESTIONS
to ask while doing a landscape analysis or transect

FOREST AND TREES OFF-FARM

- Who owns this forest/land?
- Who knows where the boundaries (if any) are?
- What institutions allocate land and look after land?
- Who makes most of the main decisions about this forest/land?
- Are there ever conflicts over the use of forest products in these areas? (Ask about both conflicts between local groups and conflicts with those from outside).
- Who is allowed to use the forest (tree and non-wood forest products) and for what purposes? Are the rules the same for all local forests?
- For trees off-farm: who is allowed to use the trees and for what purposes? Are the rules the same for all tree species? Do they vary depending on where the tree is located?
- Do people plant trees? Protect trees? If yes, which type of trees? Who plants the trees (Men? Women? Particular groups in the community?)
- Do people manage/ protect the forest? (fire management; limit or restrict access; local institutions/ groups tasked to protect)
- How does forest/tree use vary at different times of year?

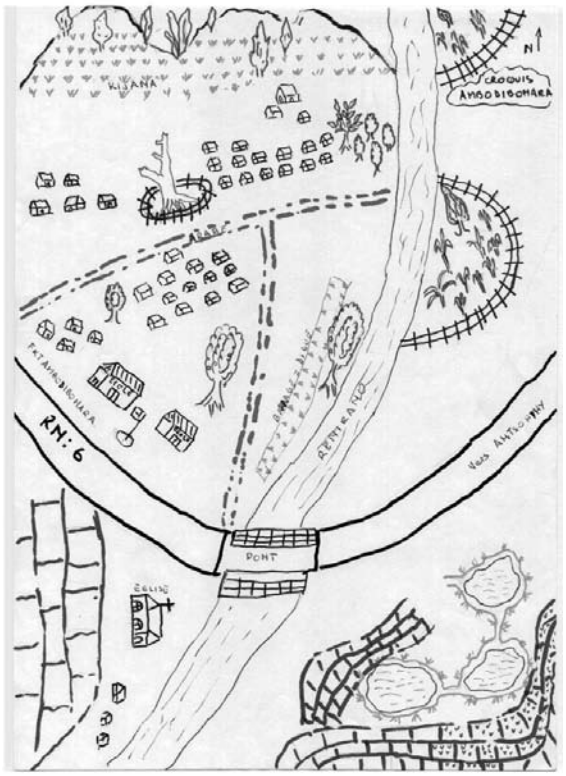
AGRICULTURE

- How is it decided who cultivates where?
- How long are plots farmed (years) and then how long are they fallow?
- When plots are resting, are they still seen as the property of particular households, or do they revert to general group ownership?
- Are areas of permanent cultivation expanding/declining?

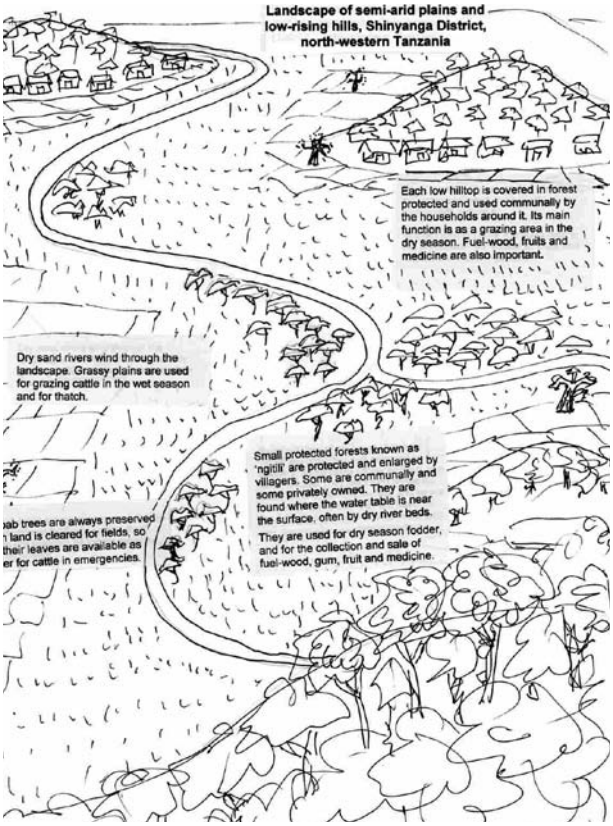
exercise during which various problems get mentioned as well, which can be picked up on in later tools, especially the last, if they do not recur spontaneously.

It is useful to make an informal sketch (or sketches) of the landscape visited, annotated with key pieces of information which were offered. The final sketch might look something like the examples below.

A WORKED EXAMPLE OF TOOL 2: LOCAL LANDSCAPE SITUATION ANALYSIS— AMBODIBONARA VILLAGE, SOFIA DISTRICT, MADAGASCAR



A WORKED EXAMPLE OF TOOL 2: LOCAL LANDSCAPE SITUATION ANALYSIS— SHINYANGA DISTRICT, TANZANIA



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TOOL 3

TIMELINE AND TRENDS

ALL VILLAGE MEMBERS SELECTED TO TAKE PART IN THE TOOLKIT EXERCISE

AIM: TO RECORD A SHORT HISTORY OF THE COMMUNITY AGAINST WHICH TO PROJECT A PICTURE OF CHANGES IN FOREST RESOURCES, IN AGRICULTURE, IN LOCAL LIVELIHOOD STRATEGIES AND IN SOURCES OF INCOME

The history of a community, especially change in the land use system, provides important background information. The purpose of this tool is to develop a timeline of key events which can then serve as a background against which to discuss trends and the current situation. This is a good tool for wide community participation. It can be conducted with the group of 40 participants selected for Tools 3-5. The field team should decide whether to conduct the tool with the group as a whole, or, if they are concerned that this will limit participation from less confident members of the community (e.g. poorer people or younger people), in separate groups of 10. The team should work to make certain that there is good participation from the various participants during the discussion.

Materials needed: **Large pieces of flip chart paper, color markers, and sticky tape.**

STEP 1

Tape two or three pieces of paper together to make a long wide rectangle. Draw a long straight horizontal line across the top of the page. At the far right-hand side, write NOW.

STEP 2

Ask the community about events in local history which mark off key periods of time starting say, 30-40 years ago or less. As each period is identified, ask what the key events were which happened in each time period.

STEP 3

When the village decides the timeline is complete, discuss a series of trends[1] across the timeline. This information may already have been mentioned, but the trends discussion usually produces a more coherent picture.

- How have forest resources (both area and quality/diversity) changed over the timeline period?
- What was happening in agriculture in each of these periods?
- What have been the changes in local livelihood strategies?
- What changes have taken place in the area in terms of the arrival of roads, schools etc., and their impact on natural resources?
- How have people's sources of income changed over the period of the timeline?
- Any key changes in the lives of men? Women? Children?

Write in the answers for each period of the timeline, adding paper to the timeline underneath the original sheets if needed. Make sure to include changes in key areas of natural resources and governance (e.g. forestry, agriculture, land tenure, institutions) but allow the villagers to include any other categories they believe to be important (e.g. one set of villagers in Madagascar wished to include gender relations as a key area of change over time).

1 It is important to discuss trends in roads, agriculture, schooling, etc. because these have a bearing on our main object, forest trends.

WORKED EXAMPLE FROM TANZANIA

In this example, from Shinyanga in Tanzania, participants established their timeline with reference to a series of political eras and events and more recently simply decades. They chose four themes to run across the timeline: cattle, forests, land ownership, and the political institutions which deal with land.

Time periods	1960s Colonial period to Independence	1970s Ujamaa and Villagization	1980s Nyerere retired 1985, slow end of Ujamaa	1990s	Now 2000- 2006
Cattle	Bush areas which used to harbour tsetse fly gradually cleared from the 1920s onwards. Cattle then multiplied. Heavy deforestation resulted.	Great growth in cattle and human numbers.	Growth in cattle and human numbers	Growth in cattle and human numbers	Too many cattle—and nowhere to feed them.
Forests	Original vegetation, woodland/bushland. *Ngitilis* set aside by Sukuma people as dry season grazing reserves, when forest cleared for agriculture. Trees were incidental - just shade protecting the grass.	Ujamaa and Villagization destroyed many indigenous natural resource systems. Many *ngitilis* destroyed when people were moved into villages and the forest they had protected was left unattended.	HASHI[2] project launched in 1986. HASHI wanted to revive the *ngitilis*. Some still there but very depleted; some newly created by HASHI. People cautious at first - watched and judged activities.	But by the 1990s people had seen that creating more *ngitilis* was a very good idea. They began to be created rapidly. This time they were not just used for fodder, but for a wider range of tree products.	Communal *ngitilis* are not always in the right place. More demand for *ngitili* products than can be supplied, especially for the poor. Complaints that there is not enough land for any more *ngitilis*.
Land ownership	Land ownership originally followed Sukuma custom. There were private fields, private grazing reserves and communal forest areas.	The Ujamaa and villagization of Nyerere created state ownership of rural lands, not private ownership. It caused degradation because actually all lands were open to anybody.	HASHI wanted to help people own their resources again.	People rushed to create their own private *ngitilis*, as well as communal village *ngitilis*. They sometimes bought land to do it.	About half of *ngitilis* are small private ones and half larger communal ones. Most owned by men—women may use them. There is a growing land shortage and some people are now landless, having sold land to others.
Institutions	A council of elders ruled the village and imposed punishments on those breaking land use rules.	Traditional institutions which used to manage *ngitilis* were destroyed	—	In 1999 the Village Government became the lowest government level.	Village Government has the right to control *ngitili* allocation and use.

2 HASHI – Soil Conservation, Shinyanga (Hifadhi Ardhi, Shinyanga). The program was supported by the Norwegian Government for many years.

WORKED EXAMPLE FROM UGANDA

In this second example, from the Nyantonzi parish of Masindi district in Uganda, changes in forestry and agriculture are described for three recent periods, distinguished by the changing political regime.

TIME PERIOD	1985/ 86-1995 People gained confidence in the new Government, leading to a new constitution in 1995	1996-2000 The first national presidential elections were made in 1996	2001-2007 The 2nd and 3rd presidential elections were made in 2001 and 2005 respectively
FORESTRY			
Ownership	Taungya in communal forests.	Rich people outside Masindi started pitsawing.	A few people have started planting trees. Residents joined outsiders to cut timber illegally from Budongo Forest Reserve
Abundance	Forest canopies were closed.	-	-
Access for women	Fetching firewood.	Fetching firewood.	Fetching firewood.
Access for men	Looking for timber and poles.	Looking for timber and poles.	Looking for timber and poles.
Management	Forest Department (FD) was not caring for the forests		Sensitisation of the people on forest importance by NFA.
Utilization	No interest in forest encroachment, land was abundant.	Less abundant land, people cultivating on their own farms.	Undertaking of shifting cultivation in privately owned forest lands
AGRICULTURE			
Land ownership	Community heads allocated land for cultivation to households	Some people started buying land.	Land acquisition is expensive and there are land conflicts too.
Size of land holdings	Very big chunks of land	—	Land holdings are about 5-10 acres to a household
Types of crops	Many grew tobacco for sale and millet for home consumption.	Maize, cassava, and sorghum were grown for food, tobacco for sale.	Rice cultivation is very recent because of the market.
Productivity	Productivity was very high	Tobacco production reduced as its price fell.	
Agricultural practices	Agricultural practices were poor	—	NAADS and BUCODO training has brought in better practices.
LIVESTOCK			
Ownership by women and men	Owned pigs and goats in small quantities	Owned pigs and goats in small quantities	Men sometimes sell without the consent of their wives knowledge
Types of animals	Hunted wild pigs and baboons for food (these eat their crops), goats were also reared.	Owned pigs and goats in small quantities	Own pigs and goats in bigger numbers
Fodder/ pasture	Fodder was very abundant.	Abundant.	Fodder is still abundant.
MARKET, TRADE AND PRICES			
Forest products	—	Not many people were involved in timber trade.	Many people harvest timber but NFA and the CFMs regulate them
Agricultural products	People were organised in co-operative unions to sell tobacco (e.g. Bunyoro Growers Union)	Mangoes were eaten free because of their abundance; tobacco prices fell and it was abandoned by some people because of over production.	There is no market for mangoes, tobacco prices are picking up and rice prices are increasing (Ushs 750-1100@ kg).
Livestock products	—	—	Some livestock sold more than in the past
EXTENSION & TRAINING			
Forestry		Illegal pitsawyers bribed forest officials.	NFA and ECOTRUST teach people about tree planting but no tree seeds/ seedlings have been given to the community members yet.
Agriculture	BAT only sensitized the farmers on tobacco growing related issues.	Mastermind (BAT's competitor) provided extension services for tobacco production.	BAT and Mastermind still carry out some extension services NAADS introduced extension services in agriculture generally. BUCODA also provides extension services but on contract basis.
Livestock			Exotic chicken and goats were introduced

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TOOL 4

LIVELIHOOD ANALYSIS

IN GROUPS SELECTED BY GENDER AND WEALTH CATEGORY

AIM: TO DISCOVER THE EXTENT OF CASH AND SUBSISTENCE RELIANCE ON FOREST RESOURCES AND THE PROPORTION OF THE TOTAL ANNUAL LIVELIHOOD (FROM ALL SOURCES) THAT COMES FROM FOREST RESOURCES.

The wealth ranking exercise (or its equivalent) will have generated groups of households of similar status. These groups will take part in exercises in which they are consulted first about the main sources of their annual cash and non-cash incomes and then about a range of other forest issues. All the exercises are conducted with the same groups.

Explain that, by a household's annual income we mean **all** the resources that a household needs to get through the year successfully. People in rural areas produce much of what they need themselves, but they do need cash for some purposes.

A NOTE ABOUT PREPARATIONS FOR TOOLS 4 and 5

Tools 4 and 5 are based on a series of charts the outlines of which have to be drawn ahead of time, if being done manually. Otherwise the tables and charts will be produced electronically by spreadsheet (a standard template is available from the PROFOR website).

Tool 4 uses five charts while Tool 5 uses two. Seven large flip-chart sheets are thus needed for each sub-group to be worked with. A minimum of four subgroups is needed (see Tool 1) for which 28 flip-chart sheets would be needed before going to the field. The task is made much easier if three or four facilitators help and if there are one meter long rulers available (or A1 cardboard sheets to act as rulers – such as the backs of flip-chart pads). The task still takes about half a day but it is a good way of making facilitators thoroughly familiar with the charts before they are used in the village. Those training the facilitators should be present to help throughout, to reduce errors.

Another task for facilitators is to count out 20 beans or stones into each of 40 or so small plastic bags—enough for 10 per group if it has been decided that there will be 10 participants in a group. Allowing a few spares, that means 800–900 beans or stones.

It is important to choose an object of a standard size and that will not confuse participants by breaking in half during the exercise. (It should not be too edible—avoid peanuts.) Choose beans or stones that do not roll about or blow away. Dry, hard maize kernels, haricot beans, coffee beans or gravel work well.

The counting is quick with a few helpers. It is important that there are exactly 20 beans in each bag.

Materials needed: 28 (7 x number of groups—it might be more than this) pre-drawn flip-chart sheets; other blank flip-chart sheets; plenty of marker pens in black (for drawing charts) and in other colors (for filling them in). Ideally, 4 meter-long rulers.

Counters for participants. Each participant in a group needs a plastic bag with 20 stones or beans in it—say 20 x 10 = 200 x 4 = 800 in all.

Calculators, compasses and protractors will be needed to prepare pie charts on flip-charts for Tool 4. Calculators are needed for percentages on other tools. Where possible, the use of laptop computers, with all the sheets set up within a spreadsheet program, is highly recommended. This saves considerable time and is a more secure method of data collection.

So a household's annual income means:

- All the items grown on farm or gathered from forests (including timber) or other off-farm natural resources, ***and sold***.
- All the items, grown on farm or gathered from forests (including timber) or other off-farm natural resources, and ***consumed or used at home without being sold.***
- Money ***received in wages or through trading***.
- Money ***sent by other family members*** living and working outside the community (remittances).

STEP 1

AN OVERVIEW OF THE MAIN CASH COMPONENTS OF THE HOUSEHOLD'S ANNUAL LIVELIHOOD

a blank table layout for this step is provided on page 9

First

- Write the heading **'Forest products'** at the top of the left hand column, and have group participants list all those they can think of that are regularly sold—the number will vary, which is why the chart cannot be completely pre-drawn.
- Then write the heading **'Farm produce—crops'**
- Then write the heading **'Farm produce—livestock'** and do the same.
- Finally write the heading **'Other sources of cash'**. Prompt if necessary for 'wage-laboring', 'wages', 'trade', 'remittances', 'compensation payments', pensions, etc.

Second

- Give each individual in the group 20 beans/stones in a plastic bag.
- Get group members, one by one, to assign ALL their 20 beans/stones across the categories on the chart, putting more beans/stones where cash income sources are more important.
- Make sure to say that it is fine to leave empty squares if no cash income comes from that source.
- Do not let individuals put beans on generic lines such as 'forest products', 'farm produce' but only on specific sources of income—'gum', 'charcoal' 'maize', etc. (see filled chart below).
- As each individual completes his/her column, and is satisfied with it (they often want to adjust a little), write the numbers in the squares, and return the beans/stones to the individual. Check that for each individual allocated 20 stones the numbers written add up to 20. Begin again with the next person.

Third

- At the end of Step 1, count totals laterally, and put them in the column on the right.
- Check that each vertical column totals 20 and that (if there are 10 people in the group) the next column to the right totals 200.

Later that evening

Work out the percentages and write them in. (This is unnecessary if the data have been recorded directly onto a computer).

STEP 2

AN OVERVIEW OF THE MAIN NON-CASH COMPONENTS OF THE HOUSEHOLD'S ANNUAL LIVELIHOOD

(following the same procedure in Tool 4 Step 1)

a blank table layout for this step is provided on page 10

First

- Write the heading **'Forest products'** at the top of the left hand column, and have group participants list all those they can think of that are regularly used. Go through all the items in step 1 (since many items are of course used in the household as well as sold) and add to them as necessary—the number will vary which is why the chart cannot be completely pre-drawn.
- Then write the heading **'Farm produce—crops'**
- Then write the heading **'Farm produce—livestock'** and do the same. Go through the list on chart 1 and add to it if necessary.

AN EXAMPLE OF TOOL 4 – STEP 1
CASH COMPONENTS OF HOUSEHOLD'S ANNUAL LIVELIHOOD

BUSONGO VILLAGE, SHINYANGA, TANZANIA — GROUP 1 POOR WOMEN

	Group Participants											
	1	2	3	4	5	6	7	8	9	10	Totals	%
Forest products											**27**	**14%**
Gum	3	-	-	7	-	-	3	6	5	-	24	
Charcoal	-	-	-	3	-	-	-	-	-	-	3	
Farm produce											**150**	**75%**
Cotton	11	10	15	6	10	10	5	14	6	6	93	
Sesame for oil	2	-	-	-	-	-	-	-	-	-	2	
Green gram	-	-	-	-	-	-	3	-	-	-	3	
Groundnuts	-	3	-	-	-	-	-	-	-	-	3	
Maize	4	7	3	4	5	4	2	-	5	4	38	
Sorghum	-	-	2	-	5	-	4	-	-	-	11	
Other sources of cash											23	11%
Petty trade	-	-	-	-	-	6	3	-	4	10	23	
TOTALS	20	20	20	20	20	20	20	20	20	20	200	100%

AN EXAMPLE OF TOOL 4 – STEP 2
NON-CASH COMPONENTS OF HOUSEHOLD'S ANNUAL LIVELIHOOD

BUSONGO VILLAGE, SHINYANGA, TANZANIA — GROUP 1 POOR WOMEN

	Group Participants											
	1	2	3	4	5	6	7	8	9	10	Totals	%
Forest products											**89**	**44%**
Wild green leaves	-	1	1	1	2	-	1	1	1	1	9	
Fuelwood	2	1	2	2	2	-	2	2	2	2	1	7
Charcoal	2	1	1	-	1	3	1	2	1	-	1	2
Mushrooms	-	1	1	1	-	-	-	-	-	-	3	
Tamarind	2	1	1	2	1	-	1	1	1	1	1	1
Honey	-	1	1	1	-	-	-	-	-	1	4	
Materials for building	2	1	2	1	2	1	1	2	2	1	15	
Thatch grass	1	1	1	1	1	1	1	1	1	1	1	0
Fodder	-	1	1	1	1	-	-	1	2	1	8	
Farm produce											**111**	**56%**
Maize	2	2	1	1	2	5	2	3	3	2	2	3
Sorghum	1	2	1	2	1	-	1	1	2	1	1	2
Groundnuts	2	1	1	1	-	3	1	1	1	1	1	2
Mung beans	-	1	1	1	2	-	1	1	1	1	9	
Sweet potatoes	2	1	2	3	3	3	3	2	2	2	23	
Sesame	1	-	-	1	1	-	1	-	-	-	4	
Greengram	1	1	1	-	-	-	1	1	-	1	6	
Green vegetables	1	1	-	-	-	2	1	1	1	1	8	
Red Beans	1	1	1	-	1	2	1	-	-	1	8	
Fruits	-	1	1	1	-	-	1	-	-	2	6	
TOTALS	20	20	20	20	20	20	20	20	20	20	200	100%

- Finally write the heading 'Food for work, barter'. Prompt if necessary.

Second

- Give each individual in the group 20 beans/stones in a plastic bag.
- Get group members, one by one, to assign ALL their 20 beans/stones across the categories on the chart, putting more beans/stones where their non-cash income sources are more important.
- Make sure to say that it is fine to leave empty squares if no cash income comes from that source.
- Do not let individuals put beans on generic lines such as' forest products', 'farm produce' but only on specific sources of income – 'gum', 'charcoal' 'maize', etc. (see completed chart on page 3).
- As each individual completes his/her column, and is satisfied with it (they often want to adjust a little), write the numbers in the squares, and return the beans/ stones to the individual. Check that the individual allocated 20 stones and numbers written add up to 20. Begin again with the next person.

Third

- At the end of Step 2, count totals laterally, and put them in the column on the right.
- Check that each vertical column totals 20 and that (if there are 10 people in the group) the next column to the right totals 200.

Later that evening

Work out the percentages and write them in (if manual data recording is used).

STEP 3

PROPORTION OF THE HOUSEHOLD'S ENTIRE ANNUAL INCOME THAT COMES FROM CASH SOURCES, AND PROPORTION WHICH COMES FROM NON-CASH SOURCES

a blank table layout for this step is provided on page 11

Explain that in the last two exercises we have looked at the income that comes from cash sources, and the income which comes from non-cash sources.

The pre-prepared chart is placed on the floor. Make sure each individual has his/her small bag containing 20 beans/ stones. Take someone's pile of stones and pile it on the mid-line between cash and non-cash. Explain as follows, demonstrating as you go:

'*Suppose this pile of stones represents your household's whole annual income, from all the sources we have just looked at. Let's split it into two, to show how big a pile the cash part of that income represents, and how big a pile the non-cash part of it represents. This side of the line is the cash side, and that side is the non-cash side. (Make it clear which is which if participants are not literate).*

If you are a school teacher, probably most of your income is in cash, like this, but a little comes from the fodder your wife gathers for your animals – so you use some non-cash sources too. If you are a farmer, you might decide that your cash pile looks smaller, like this, and your non-cash pile larger, like this.' [1]

It is important to try to avoid using the words 'proportion' or 'percentage' – these are too abstract. Invite one of the more self-confident participants in each group to have a try first. S/he can spend time thinking about it and pushing stones to and fro across the line. Do not hurry him/her.

1 Some reviewers found it hard to believe that villagers would be able to make this cash/ non-cash estimate. However, from our experience at a variety of sites and wealth groups, so long as it is explained and demonstrated in an unrushed way, making these estimates gives them no trouble at all. It is essentially the calculation that rural people have to perform in their heads to get through the year.

AN EXAMPLE OF TOOL 4 – STEP 3 PROPORTION OF INCOME FROM CASH AND NON-CASH SOURCES

BUSONGO VILLAGE, SHINYANGA, TANZANIA — GROUP 1 POOR WOMEN

	CASH		NON-CASH		Total
1	12		08		20
2	11		09		20
3	11		09		20
4	10		10		20
5	11		09		20
6	10		10		20
7	08		12		20
8	05		15		20
9	12		08		20
10	08		12		20
TOTALS	98	49%	102	51%	200

When the individual is happy with the relative sizes of his/her two piles, say, 'So—you mean this pile to represent cash and this pile non-cash. Am I right?' When he/she agrees, count the stones in each pile, write the numbers in the cash and non-cash columns against number 1 below, and start with the next person.

This exercise has been tested successfully in a variety of country contexts. Those who have not observed it being carried out find it hard to believe that participants do not find the assessment difficult, once they have understood what is being asked for. This represents the rough and ready calculations that rural people have to make in their heads every year.

STEP 4

CALCULATIONS FOR FACILITATORS TO UNDERTAKE, BASED ON TOOL 4, STEPS 1, 2 AND 3

a blank table layout for this step is provided on page 12

NB: Tool 4 Step 4 does not need to be done with the villagers. It is an analytic tool that can be done by facilitators in the evening to prepare for the plenary report-back to the village (see Section 4).

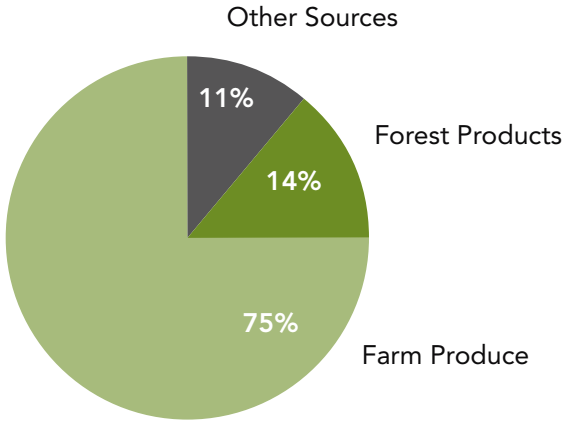
Tool 4 Steps 1-3 provide the data for a set of diagrams to express the contribution of forestry to livelihoods in terms of a set of simple pie charts for communication both to local audiences and national-level policy audiences. The choices made by individual participants in Step 1 (their own main sources of cash coming from forest resources, farm resources and other cash sources), and Step 2 (forest and farm-based non-cash livelihood resources) are totalled and then represented as percentages on the charts. They are turned into pie charts for presentations back to the community and to higher level bodies in the following way. [2]

1. For each of Step 1 and Step 2, work out what percentage of the total is taken up by each of the group's 'forest products,' 'farm produce,' 'livestock (if any)' and 'cash sources (if any)'.
2. Draw a large pie chart (circle) for each step, using compasses.
3. Using a protractor, and remembering that a circle has 360°, each percentage category can be represented on the circle by multiplying the percentage by 3.6 to give correct proportions.

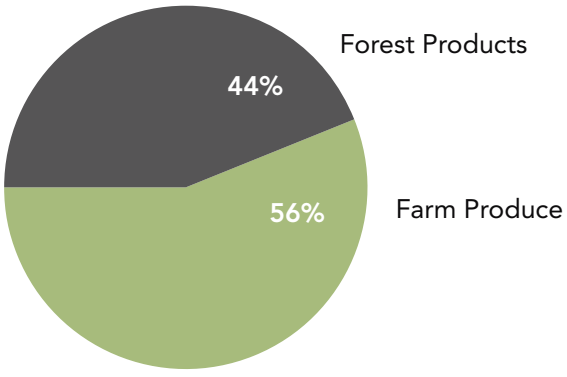
2 If computers are available these pie charts can easily be generated with Excel. But if poorly resourced district officials are being trained, it is better that they know how to make the calculations and present findings without using computers.

Poor Women	Cash			Non-Cash			Cash + non-cash %
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Forest Products	14	6.86	7	44	22.44	22	29
Farm produce	75	36.75	37	56	28.56	29	66
Livestock	0	0	0	0	0	0	0
Other Cash	11	5.39	5	-	-	-	5
Totals (%)	100	49.00	49	100	51.00	51	100

PIE CHART FROM STEP 1 IN BUSONGO, TANZANIA
POOR WOMEN, CASH



PIE CHART FROM STEP 2 IN BUSONGO, TANZANIA
POOR WOMEN, NON-CASH



4. For example, suppose the chart gives:

Forest products	14%	x	3.6	=	50 degrees
Farm produce	40%	x	3.6	=	144 degrees
Livestock	35%	x	3.6	=	126 degrees
Other cash sources	11%	x	3.6	=	40 degrees
TOTALS	100%			=	360 degrees

A third step asks participants to divide their piles of stones into two which represent, by their size, the relative weighting of cash and subsistence components in their annual income. In the case of the Busongo 'poor women' group, this came to 49% from cash, and 51% from subsistence items.

Combining results from the three steps

Using these weightings, the two pie-charts representing the cash and subsistence components of the income can be combined into a single final pie-chart which represents the contribution (cash and subsistence) of forests, agriculture, livestock, and cash–income to the total annual livelihood. The way to make this calculation (using no more than a calculator) follows below.

Column 1—shows the original cash figures from Tool 4 Step 1.

Column 4—shows the original non-cash figures from Tool 4 Step 2.

Columns 2 and 5—From Tool 4 Step 3 we discovered that in the case of the poor women's group from Busongo, the cash contribution to the year's income was about 49%, and the non-cash contribution is 51%. Write these figures in at the bottom of these columns.

Column 2—To obtain the figures that total 49% in column 2, divide each figure in column 1 by 100, and multiply by 49.

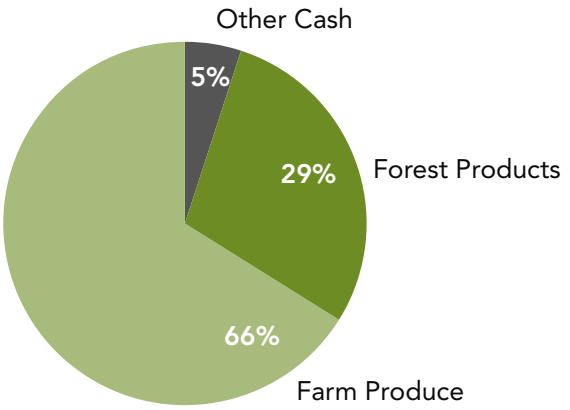
Column 5—To obtain the figures that total 51% in column 5, divide each figure in column 4 by 100, and multiply by 51.

Columns 3 and 6 round the figures up or down so you have whole numbers. Round figures coming to .50 or above up to the next whole number, and round those coming to .49 or less, down to the next whole number, as shown.

Column 7—Add together the figures in columns 3 and 6 to obtain the numbers in Column 7, which should then total 100%. Column 7 gives you the combined cash and non-cash contribution of the listed items to the annual income. Thus Agricultural Products contribute 66% and Forest Products 29%.

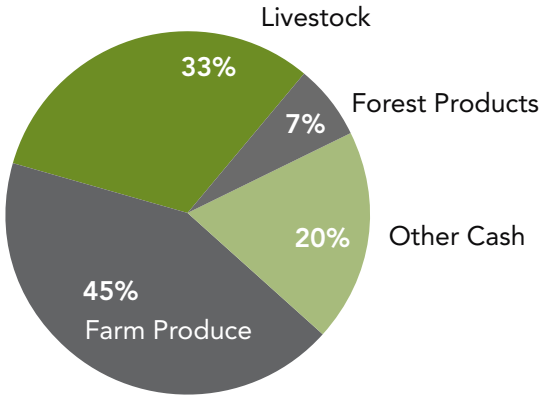
The resulting pie-chart looks like this:

PIE CHART FROM STEP 1 IN BUSONGO, TANZANIA
POOR WOMEN, CASH AND NON-CASHS

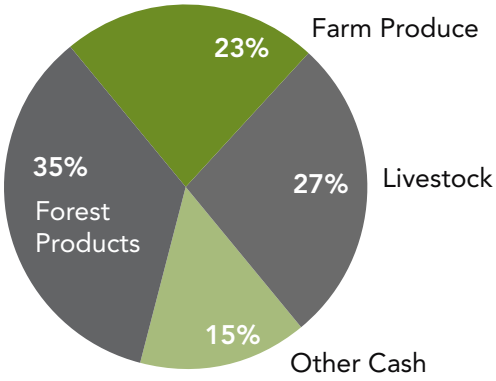


All three of these pie-charts give quick instantly-accessible ways of seeing the extent to which Busongo's poorer women depend on forest resources. By contrast, the way the three pie-charts look in the case of Busongo's middle-income and rich men is displayed at right.

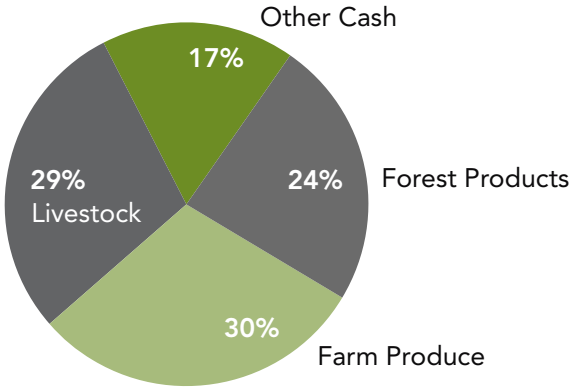
PIE CHART FROM STEP 1 IN BUSONGO, TANZANIA
MIDDLE-INCOME AND RICH MEN, CASH



PIE CHART FROM STEP 2 IN BUSONGO, TANZANIA
MIDDLE-INCOME AND RICH MEN, NON-CASH



PIE CHART FROM STEP 3 IN BUSONGO, TANZANIA
MIDDLE-INCOME AND RICH MEN, CASH AND NON-CASH



RANKING THE IMPORTANCE OF TREE AND FOREST PRODUCTS DRAWN FROM TOOL 4

A ranking of forest products, in terms of their importance for both cash and non-cash use, can be made by referring to the first two data tables of Tool 4. Each forest product is listed in the table below, using the totals for each respondent group to rank their importance, beginning with the highest scoring products. Where products have the same total score they are given the same rank (see example). The number of ranked products is also recorded.

Several issues stand out:

- All groups rely on a greater range of forest products for their non-cash needs than their cash needs.
- Each group relies on a different forest product as their main source of cash income: for A/B men it is bushmeat, for A/B women it is mushrooms, for C/D men it is snails, and for C/D women it is firewood.
- The C/D women rely on the largest range of forest products for cash, whilst the C/D men utilize the largest range of forest products for non-cash needs.
- Bushmeat (i.e. hunting) is predominantly a male activity.
- Mushroom and snails appear to be the most widely used non-timber forest products (in cash and non-cash terms).
- Medicinal plants are also widely used by all groups, although they have a lower rank than for mushrooms and snails—perhaps as a consequence of the intermittent need for medicine compared to the everyday need for foodstuffs.

RESULTS FROM THE ANALYSIS OF TOOL 4 RANKING THE IMPORTANCE OF TREE AND FOREST PRODUCTS, BY GENDER AND BY WEALTH RANK

ASSIN AKRPONG, GHANA

	Poor women		Middle/rich women		Poor men		Middle/rich men	
Forest Product	Cash	Non-cash	Cash	Non-cash	Cash	Non-cash	Cash	Non-cash
Bushmeat	1	1			3	1		6
Wrapping leaves	2					13	4	
Mushrooms	2		1	5		2	3	3
Charcoal	2	4					5	9
Wild Yam		4				3	6	5
Sponges		7		9		7		
Spices				6		11		
Snails		6		3	1	5	2	2
Pestle		2				9		7
Palm wine (adoka)					3			
Medicines		8	2	4	2	7		4
Lumber								
Handicrafts				1				
Fruits and Nuts				6		12		
Firewood		3		2		4	1	1
Chewsticks				6		10		7
Building materials		9				5		
Total number of ranked products	4	9	2	9	4	13	6	9

Note that low numbers mean a high ranking

LAYOUT FOR TOOL 4 – STEP 1
CASH COMPONENTS OF HOUSEHOLD'S ANNUAL LIVELIHOOD

Name of location:

Name of group:

	Group Participants											
	1	2	3	4	5	6	7	8	9	10	Totals	%

LAYOUT FOR TOOL 4 – STEP 2
NON-CASH COMPONENTS OF HOUSEHOLD'S ANNUAL LIVELIHOOD

Name of location:

Name of group:

	Group Participants											
	1	2	3	4	5	6	7	8	9	10	Totals	%

LAYOUT FOR TOOL 4 – STEP 3
PROPORTION OF INCOME FROM CASH AND NON-CASH SOURCES

Name of location:

Name of group:

	CASH	NON-CASH	Total
1			20
2			20
3			20
4			20
5			20
6			20
7			20
8			20
9			20
10			20
11			20
12			20
13			20
14			20
15			20
16			20
17			20
18			20
19			20
20			20

RESULTS FROM THE ANALYSIS OF TOOL 4 RANKING THE IMPORTANCE OF TREE AND FOREST PRODUCTS, BY GENDER AND BY WEALTH RANK

Name of location:

Name of group:

	Poor women		Middle/ rich women		Poor men		Middle / rich men	
Forest Product	Cash	Non-cash	cash	Non-cash	Cash	Non-cash	cash	Non-cash

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TOOL 5

FOREST PROBLEM AND SOLUTION MATRIX

IN GROUPS SELECTED BY GENDER AND WEALTH CATEGORY

AIM: TO IDENTIFY AND RANK THE MAIN FOREST PROBLEMS, AND SUGGEST POTENTIAL SOLUTIONS. PROBLEMS OF LAW, POLICY, TENURE AND ACCESS ARE CAPTURED THROUGH THIS TOOL.

Ask: What do you think are the main forest problems in this area? Brainstorm a list and write them down in the left hand column.

Roads/markets: If no mention of markets or road access is made, ask if there are problems in getting forest products to market, or in accessing markets for forest products

A NOTE ABOUT PREPARATIONS FOR TOOLS 4 and 5

Tools 4 and 5 are based on a series of charts the outlines of which have to be drawn ahead of time, if being done manually. Otherwise the tables and charts will be produced electronically by spreadsheet (a standard template is available from the PROFOR website).

Tool 4 uses five charts while Tool 5 uses two. Seven large flip-chart sheets are thus needed for each sub-group to be worked with. A minimum of four subgroups is needed (see Tool 1) for which 28 flip-chart sheets would be needed before going to the field. The task is made much easier if three or four facilitators help and if there are one meter long rulers available (or A1 cardboard sheets to act as rulers – such as the backs of flip-chart pads). The task still takes about half a day but it is a good way of making facilitators thoroughly familiar with the charts before they are used in the village. Those training the facilitators should be present to help throughout, to reduce errors.

Another task for facilitators is to count out 20 beans or stones into each of 40 or so small plastic bags—enough for 10 per group if it has been decided that there will be 10 participants in a group. Allowing a few spares, that means 800–900 beans or stones.

It is important to choose an object of a standard size and that will not confuse participants by breaking in half during the exercise. (It should not be too edible—avoid peanuts.) Choose beans or stones that do not roll about or blow away. Dry, hard maize kernels, haricot beans, coffee beans or gravel work well.

The counting is quick with a few helpers. It is important that there are exactly 20 beans in each bag.

Materials needed: 28 (7 x number of groups—it might be more than this) pre-drawn f ip-chart sheets; other blank f ip-chart sheets; plenty of marker pens in black (for drawing charts) and in other colors (for filling them in). Ideally, 4 meter-long rulers.

Counters for participants. Each participant in a group needs a plastic bag with 20 stones or beans in it—say 20 x 10 = 200 x 4 = 800 in all.

Calculators, compasses and protractors will be needed to prepare pie charts on f ip-charts for Tool 4. Calculators are needed for percentages on other tools. Where possible, the use of laptop computers, with all the sheets set up within a spreadsheet program, is highly recommended. This saves considerable time and is a more secure method of data collection.

LAYOUT FOR TOOL 5 – STEP 1

Name of location _____ *and name of group* _____

TOOL 5: FOREST PROBLEM AND SOLUTION MATRIX SHEET 1 : MAIN FOREST PROBLEMS												
	Group Participants										Totals	%
	1	2	3	4	5	6	7	8	9	10		
Problem 1												
Problem 3												
Product 3, etc.												
TOTALS	20	20	20	20	20	20	20	20	20	20	200	100%

Tenure/access rights: If no mention of problems accessing forest resources is made, ask if there are tenure or access problems

- As each individual completes his/her column, write the numbers in the squares, return the beans/stones to the individual, and begin again with the next person.
- Count totals laterally, and put them in the column on the right.
- This will give a ranking of problems from greatest to least.
- Copy these problems down, IN RANK ORDER, onto the next sheet before working through it with the group.

The problems raised – as perceived by richer and poorer, male and female groups will cover a range of issues as the example shows. Each time this exercise has been run, there has been a very good discussion afterwards of where solutions ought to come from. It is usually possible to sort problems out into:

- Problems that could be solved by the household itself, or by the village government using the rights it has.
- Problems that need to be taken to the local authorities beyond the village. In the example below, some clearly constitute requests for help, or adjudication, to higher local authorities.
- Problems that (even if villagers do not understand this) can only be solved at higher levels. Some problems given in the list below need to be addressed at the national level.

The different kinds of problems can be marked with different colored markers, so that they can be grouped together, for presentation at the final plenary (Tool 6) and for raising elsewhere.

LAYOUT FOR TOOL 5 – STEP 2

Name of location _____ *and name of group* _____

TOOL 5: FOREST PROBLEM AND SOLUTION MATRIX SHEET 2 : FOREST PROBLEMS RANKED	
Forest Problems Ranked	**Solutions To The Main Forest Problems**
1	
2	
3 etc.	

WORKED EXAMPLE FROM TANZANIA: THE FINAL COLUMN WAS ADDED FOLLOWING DISCUSSIONS

FOREST PROBLEMS	SOLUTIONS TO MAIN FOREST PROBLEMS	LEVEL AT WHICH TO DEAL WITH ISSUE
LAND SHORTAGES FOR FARMING AND FOR THE CREATION OF NEW VILLAGE FORESTS		
Pw: 1 Lack of land for forest restoration/ village forests	Tree boundary planting Agroforestry	Some solutions at farm level, but lack of village forest land and farm land needs to be addressed at village, district and regional level.
Pw: 4 Landlessness	Reallocation of land for equal utilization especially for those who have large pieces of land not fully utilized	
LACK OF WATER / DROUGHT		
Pw: 2 Lack of water hinders tree-planting	Plant trees during rainy season	Farm level
Rw: 3 Dying of tree seedlings due to drought	Water tree seedlings and use manure. Use of natural regeneration of tree seeds dispersed by cattle.	Farm level
Rm: 5 Drought	Tree-planting of drought tolerant species and fruit trees.	Farm level
FUELWOOD SHORTAGES		
Pw: 3 Only one source of fuelwood	On-farm tree-planting	Farm level, but see also land redistribution problems
CONFLICT WITH AUTHORITIES OVER CHARCOAL		
Pw: 5 Conflict between villagers and foresters over forest products	Re: charcoal-burning from own farmland, the Village Government should provide the permit so that it can be taken to market. That permit should be respected on the road by police etc.	Lack of clarity about documents needed to sell charcoal from own land. District Level and Village Government.
TREE DISEASES		
Rw: 4 Dying of tree seedlings due to diseases and insects	Plant many. Use pesticides and mixed ashes and manure.	Farm-level
GUM MARKETING		
Rm: 4 Lack of promising markets for gum (+ Low market prices for gum); 7 Lack of knowledge on gum quality and the mixing of gums of different qualities and tree species	Request assistance on better markets for gums, and better knowledge of current prices. Education to gum collectors on the importance of gum quality, and the importance of not mixing different gums.	Better market intelligence, through request from District-Regional level forestry officials to National Forestry and Beekeeping Division of Ministry of Natural Resources.
ILLEGAL USE OF VILLAGE FORESTS BY OTHERS		
Rw: 1 **Illegal cutting of trees** in village land and forest conservation areas	To establish protection measures for village and private owned forests. Sharing patrol/ policing of the resources. Education/ sensitization through meetings in the village.	Village Government and some outside facilitation from ward forester
Rw: 5 Illegal tree cutting for fuelwood for home use	For conservation areas, get permits from sub-village forest officer. For village forest, get permission from the village chairman owning village forest. Abide by regulation on use/ harvesting of forest resources as advised by authorities (forest department and village government).	
Pm: 1 **Accidental starting of forest fires**	Arrest and take to Village Government who will fine him/her.	Village Government
Rw: 2 **Illegal/ unauthorized grazing** of cattle in village forests	A village meeting to put in place security strategies to solve the problem of illegal activities. Use village bylaws appropriately. Change security guards.	Village Government
Pm: 2 Unauthorized grazing	Arrest and take to Village Government to fine or warn him/ her.	Village Government

WORKED EXAMPLE FROM TANZANIA, CONTINUED

FOREST PROBLEMS	SOLUTIONS TO MAIN FOREST PROBLEMS	LEVEL AT WHICH TO DEAL WITH ISSUE
ILLEGAL USE OF VILLAGE FORESTS BY OTHERS		
Rm: 6 Inappropriate livestock grazing	Enact local bylaws on sustainable forest utilization. These should be given equal importance among other bylaws in the village/ ward/ division. Reinforcement of current bylaws on forest utilization and management.	Village Government/ Ward/ Division
Pm: 3 **Unauthorized tree cutting**	Arrest and take to Village Government to be judged and punished accordingly (fine or warn)	Village Government
Pm: 4 **Unauthorized collection digging of herbal medicine products**	Arrest and take to Village Government with his/ her roots/ medicine as evidence.	Village Government
Pm: 5 **Unauthorized/ illegal cultivation in forest**/ village forest areas	Arrest, take to court, fine.	Village Government
Pm: 6 **Illegal hunting in village forests**	Arrest and report to village bylaws councils to be fined (punished).	Village Government
NEED FOR MORE FORESTRY INPUT AT THE LOCAL LEVEL		
Rm: 1 Lack of forestry extension officers	Urgent request to government to provide forest extension officers for improved forest productivity. Education through seminars and workshops on forest conservation.	District Level Government
Rm: 2 Lack of education on tree-raising and forest conservation	Education on sustainable forest management and conservation through seminars and workshops.	Contact ward-level forestry official
Rm: 3 Lack of projects for seed supply, tree nurseries and planting	Request projects on tree-planting and conservation. Requests for tree seeds, seedlings, plastic poly bags, and booklets on tree-establishment. Requests for help to form farmer groups to undertake tree-nursery raising.	District Level government

Rm = rich men; Pm = poor men; Rw = rich women; Pw = poor women

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TOOL 6

RANKING FOREST PRODUCTS

AIM: TO RANK FOREST PRODUCTS BY IMPORTANCE, FOR CASH AND/ OR FOR SUBSISTENCE USES.

Obtaining a ranking of the importance of tree and forest products can be done without administering a further tool to the four groups. Key data can be drawn from Tool 4 Steps 1 and 2, collating the results from all the four groups' results by the facilitators.

The results show clearly which are the most valued forest products, and which are of most value to the poor and to women.

Cattle are the chief asset and store of wealth in Shinyanga, and they are fed, according to their owners, from 60-90% of the time on grazing which is reserved for them inside small privately and communally owned forests, where the trees protect the grazing until late in the dry season.

However, although the huge importance of cattle came out in Tool 4 (for all groups except poor women), and they were far more important than any (other) forest product, fodder was only mentioned inconsistently as a 'forest product'. For that reason, cattle have also been included here.

a blank table layout for this step is provided on the reverse

A WORKED EXAMPLE OF TOOL 6

RANKING THE IMPORTANCE OF TREE AND FOREST PRODUCTS, BY GENDER AND BY WEALTH RANK

	Poor women		Middle/rich women		Poor men		Middle /rich men	
Forest Product	Cash	Non-cash	Cash	Non-cash	Cash	Non-cash	Cash	Non-cash
Cattle			1	1	1	1	1	1
Gum	1		2		2		4	
Fuelwood		1	4	2	4			
Building materials		2		5		3		2
Traditional medicine							3	3
Wild animals, birds				3				
Charcoal	2	3	3	7	3	2	2	4
Tamarind and other wild fruit		4						
Timber					5	4		
Thatch grass		5	5	5				
Fodder		7		4				
Wild green leaves, vegetables		6						
Honey		8						
Mushrooms		9						

Note that low numbers mean a high ranking

LAYOUT FOR TOOL 6: RANKING THE IMPORTANCE OF TREE AND FOREST PRODUCTS, BY GENDER AND BY WEALTH RANK

	Poor women		Middle/rich women		Poor men		Middle /rich men	
Forest Product	Cash	Non-cash	Cash	Non-cash	Cash	Non-cash	Cash	Non-cash

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TOOL 7

MILLENNIUM DEVELOPMENT GOALS CHART

AIM: TO SHOW THE CONTRIBUTION OF FORESTS TO THE ACHIEVEMENT OF THE MDGS.

All the data from the Steps in Tool 4 are useful for completing a chart which shows the contribution of forests in this location to the achievement of the Millennium Development Goals. This chart will not be used in the village, but is filled in after discussion and analysis by the toolkit team and facilitators.

WORKED EXAMPLE FROM TANZANIA

THE MILLENNIUM DEVELOPMENT GOALS AND TARGETS, AND THE CONTRIBUTION OF FORESTS TO THEM			
GOALS	TARGETS	POTENTIAL CONTRIBUTION OF FORESTS TO THESE	ACTUAL CONTRIBUTION OF FORESTS IN THIS CASE (drawn from Tool 4, steps 1,2,3) Busongo, Tanzania
Goal 1: Eradicate extreme poverty and hunger	Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than $1 a day	Are improvements in livelihoods coming about as a result of using the forest?	Villagers cite forest contribution to livelihoods of 20-29% in Busongo, Tanzania. Charcoal, fuelwood, ghee and milk, livestock, gum, thatch and fodder grass contribute directly and indirectly to the meeting of these targets. Forest protection ensures their availability.
	Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	Are improvements in food security coming about as a result of using the forest?	
Goal 2: Achieve universal primary education	Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	Does generation of cash from forest products help access of primary age children to school (where fees and bus-fares are barriers)?	Livestock, charcoal, gum, fodder and thatch grass sales all mentioned for these purposes by individuals. Forest protection ensures their availability. Village forests are used to construct staff houses for primary schools and extra classrooms.
Goal 3: Promote gender equality + empower women	Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015	Girls' access to school cannot be directly promoted through using the forest. But girls as well as boys are more likely to attend school where forest incomes help women to find cash for school fees and uniforms. As incomes rise overall, it is observed that girls are more likely to be sent to school as well as boys.	Women mention goats and cattle as items sold to raise money for these expenses. Forest protection ensures their availability.

WORKED EXAMPLE FROM TANZANIA, CONTINUED

THE MILLENNIUM DEVELOPMENT GOALS AND TARGETS, AND THE CONTRIBUTION OF FORESTS TO THEM			
GOALS	TARGETS	POTENTIAL CONTRIBUTION OF FORESTS TO THESE	ACTUAL CONTRIBUTION OF FORESTS IN THIS CASE (drawn from Tool 4, steps 1,2,3) Busongo, Tanzania
Goal 4: Reduce child mortality	Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	Are improvements in access of mothers and children to good quality foods, to forest medicines and to the money to buy food and pay for medical attention coming about as a result of using the forest?	Charcoal, fuelwood, ghee and milk, livestock, gum, thatch and fodder grass contribute directly and indirectly to the meeting of these targets. Forest protection ensures their availability.
Goal 5: Improve maternal health	Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio		
Goal 6: Combat HIV/AIDS, malaria, and other diseases	Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	Are improvements to health coming about as a result of using the forest for food, medicine, and to pay for medical attention?	Charcoal, fuelwood, ghee and milk, livestock, gum, thatch and fodder grass contribute indirectly to the meeting of these targets. Forest protection ensures their availability.
	Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases		
Goal 7: Ensure environmental sustainability	Target 9: Integrate the principles of sustainable development into country policies and programs, and reverse the loss of environmental resources	Are improvements to environmental resources coming about as a result of better protection of forests (which occurs, for example, where pro-poor policies of devolution and tenure or access rights are secured)?	Households invest in, and enrich, their small 'village forests' because they own them and the forests support their animals ('their bank'). The Village Government protects the forest, applies bylaws and encourages natural regeneration, so that a good flow of products continues to be available
	Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water	Are there any improvements to water flow/water quality noticeable in this location, as a result of better protection of the forest?	NO FIELD DATA
	Target 11: Have achieved, by 2020, a significant improvement in the lives of at least 100 million slum dwellers	Not the direct task of rural people. But better rural livelihoods reduce migration to towns/ cities.	NO FIELD DATA
Goal 8: Develop a global partnership	Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system	NOT APPLICABLE	NOT APPLICABLE

WORKED EXAMPLE FROM CAMEROON

THE MILLENNIUM DEVELOPMENT GOALS AND TARGETS, AND THE CONTRIBUTION OF FORESTS TO THEM			
GOALS	TARGETS	POTENTIAL CONTRIBUTION OF FORESTS TO THESE	ACTUAL CONTRIBUTION OF FORESTS IN THIS CASE (drawn from Tool 4, steps 1,2,3) Woteva/ Lyssoka, South West, Cameroon
Goal 1: Eradicate extreme poverty and hunger	Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than $1 a day	Are improvements in livelihoods coming about as a result of using the forest?	Percentage of livelihood supported by forest is between 2-22%, bush meat, honey, fuel wood, wild vegetables, wild fruits and small scale commercial timber are primary sources of income; they contribute directly to meeting these targets; Use of forest as farmlands provide food products which contribute between 8-38% of livelihood. Protection and restricted access from strangers ensures reduced pressure and therefore their availability
	Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	Are improvements in food security coming about as a result of using the forest?	
Goal 2: Achieve universal primary education	Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	Does generation of cash from forest products help access of primary age children to school (where fees and bus-fares are barriers)?	Timber from the forest, has been used to construct benches for a primary school and cash derived from sales of timbers and NTFP like bush meat, honey, and fuel wood are used for paying school fees, and buying school supplies. Payment of the Parent Teacher Association (PTA) fees is used to pay part time teachers. Protection and restricted access from strangers ensures reduced pressure and therefore their availability.
Goal 3: Promote gender equality and empower women	Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015	Girls' access to school cannot be directly promoted through using the forest. But girls as well as boys are more likely to attend school where forest incomes help women to find cash for school fees and uniforms. As incomes rise overall, it is observed that girls are more likely to be sent to school as well as boys.	Women mention selling forest products like timber, honey, spices and fuel wood to pay fees for both male and female children.
Goal 4: Reduce child mortality	Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	Are improvements in access of mothers and children to good quality foods, to forest medicines and to the money to buy food and pay for medical attention coming about as a result of using the forest?	Use of locally available medicinal plants was mentioned to contribute directly for the treatment of some common diseases like malaria and typhoid. Cash from sales of forest products like bush meat, timber, honey and fuel wood is used to pay medical bills at a nearby village health centre. Protection and restricted access from strangers ensures reduced pressure and therefore their availability.
Goal 5: Improve maternal health	Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio		
Goal 6: Combat HIV/AIDS, malaria, and other diseases	Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	Are improvements to health coming about as a result of using the forest for food, medicine, and to pay for medical attention?	Use of locally available medicinal plants was mentioned to contribute directly for the treatment of some common diseases like malaria and typhoid. Cash from sales of forest products like bush meat, timber, honey; fuel wood is used to pay medical bills at a nearby village health centre. Protection and restricted access from strangers ensures reduced pressure and therefore their availability.
	Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases		

WORKED EXAMPLE FROM CAMEROON

THE MILLENNIUM DEVELOPMENT GOALS AND TARGETS, AND THE CONTRIBUTION OF FORESTS TO THEM			
GOALS	TARGETS	POTENTIAL CONTRIBUTION OF FORESTS TO THESE	ACTUAL CONTRIBUTION OF FORESTS IN THIS CASE (drawn from Tool 4, steps 1,2,3) Woteva/ Lyssoka, South West, Cameroon
Goal 7: Ensure environmental sustainability	Target 9: Integrate the principles of sustainable development into country policies and programs, and reverse the loss of environmental resources	Are improvements to environmental resources coming about as a result of better protection of forests (which occurs, for example, where pro-poor policies of devolution and tenure or access rights are secured)?	Households invest in the forest by having a protected community forest, and fruit trees, and by not felling all trees on their owned farmlands to ensure sustainability of the forest resources; There is a feeling of ownership of the forest by the entire village and extraction of some products like fuel wood and timber are controlled by the village council which also collect levies from an external timber exploiter and the tourism organisation (ecotourism). Protection of the seedlings of timber species in their respective farms.
	Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water	Are there any improvements to water flow/ water quality noticeable in this location, as a result of better protection of the forest?	The village use revenue from the forest to maintain local pipe borne water supply.
	Target 11: Have achieved, by 2020, a significant improvement in the lives of at least 100 million slum dwellers	Not the direct task of rural people. But better rural livelihoods reduce migration to towns/ cities.	Information obtained reveal that most persons considered wealthy with Zinc roofed houses, Motorbikes and small scales enterprises in the village got their money from sales of timber, fuel wood and ecotourism. This activity helped employ some youths who are now based in the village and reduced the rate of theft and prostitution thus contribute in its development. Villagers mostly depend on forest products for payment of electricity bills, and purchases of basic needs, thereby improving livelihoods.
Goal 8: Develop a global partnership	Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system	NOT APPLICABLE	

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TOOL 8

MONETARY VALUES

AIM: TO EXPRESS THE CONTRIBUTION OF FORESTRY IN MONETARY TERMS.

In order to make the case for the importance of forests to local people, some kind of numerical data is almost essential. Calculations suggested here view the data gathered during the Field Toolkit exercise in the context of official per capita income data. This is the only way of deriving numerical data from toolkit data. Even a rough and ready method for assigning cash values to the forest proportion of annual incomes can be useful for making a preliminary case for the importance of including forest product questions in future household surveys.

The critical first step is to obtain data from the national or provincial statistics body and to understand what these figures do and do not include. The data needed for this exercise, which should be readily available, include:

- Mean income for the country
- Mean income for the actual province, district, ward or village surveyed (or at least a breakdown between rural and urban income)
- An analysis of where this income comes from (e.g. percentages from employment, remittances, agriculture and other activities)
- Mean household size for the country, and for the actual province, district, ward or village surveyed
- The number of households in the village or district where the tools were applied
- The number of households in each of the four wealth categories (these figures come from Tool 1, Wealth Ranking, rather than from official statistics)

Usually, the official statistics on sources of household income do not include non-cash income. Sometimes the statistics do include non-cash income from agriculture but not non-cash income from collected wild products and forestry (as in the worked example from Tanzania below). It is important to know whether and how different forms of non-cash income are included, because these differences will affect your calculations of monetary value.

Two worked examples, from Tanzania and Madagascar, demonstrate the use of this tool using slightly different approaches. Again, note that your calculation will most likely need to be adapted according to the kind of official statistics that you have and the assumptions made in those statistics (e.g. inclusion of forest products and of non-cash income). The example from Tanzania is worked in US$ values, useful for international communications, but can be worked in the same way in the national currency.

WORKED EXAMPLE FROM TANZANIA

Figures and definitions from Bureau of Statistics data

1. The average per capita income for all Tanzanians in 2005 stood at $327.

Making an estimate of unaccounted for income from forests. The example of poor/very poor women in Busongo

Cash income		Cash income estimated as 49% of total income	
1.Forest	14%	6.86	7
2. Farm	75%	36.75	37
3. Other	11%	5.39	5
	100%	49.00	49
Non-cash income		Non-cash income estimated as 51% of total income	
4. Forest	44%	22.44	22
5. Farm	56%	28.56	29
	100%	51.00	51
Total annual cash and non-cash income		100.00%	100%

Wealth Rank categories of HHs in Busongo		Column 1 Ave. No of Cattle (score 1 per head)	Column 2 Ha. of land (score 3 per ha)	Column 1+2 Wealth Score	Wealth score x no. of HHs	% of Busongo income owned by each wealth category
Rich HHs	18	30	10 x 3 =30	60	1080	28.0
Middling	29	15	5 x 3 =15	30	870	22.0
Poor	150	5	2 x 3 = 6	11	1650	42.0
Very poor	58	1	1 x 3 = 3	4	290	8.0
TOTALS	255				3890	100.0

2. Shinyanga (where the toolkit was tested), as one of the country's poorest regions averages 74% of this figure, or $242.
3. Average household size in Shinyanga is about six, so the average household income in the region is $1,452.
4. Per capita income ***includes*** cash income from all sources (1, 2 and 3 in the chart) and non-cash income in the form of farm-raised crops consumed at home (5 in the chart). It ***excludes*** non-cash off-farm income such as forest products, which are consumed and not sold (4 in the chart).

USING THE FIGURES IN CONJUNCTION WITH TOOLKIT DATA

1. *Adding in the missing fraction of income derived from non-cash forest resources.* The average per household income figure from the official statistics ($1452) includes non-cash income from agriculture but not from forestry. Therefore the total household income (cash and non-cash) must be higher than the official figure. If 22% of total household income is non-cash income from forestry, then the total household income amounts to 100/(100-22) x $1452 = $1862. This is an additional $410 a year per household.
2. *Additionality.* An additional $410 a year for a household ($68 a head) may not sound like much, but the sum may be much more than the annual per capita sum allocated by the district to a specific budget item such as health or education in the area.

GOING BEYOND AN AVERAGE PER CAPITA FIGURE: WEALTH DISTRIBUTION

However, an average figure for the whole of Shinyanga does not allow us to look at the different cash value of forest for richer and poor people. Is there any way of taking the calculation further? An attempt was made as follows.

1. In the original village wealth-ranking exercise, the team was told that there were 255 households in the village in total of which 18 were wealthy, 29 were middling, 150 were poor and 58 were very poor.
2. The team was also given average cattle numbers and land holdings for each of these categories as indicators.
3. From these, a simple scoring system was devised in order to develop a 'wealth score' for each category, with which to develop an indication of wealth distribution among the four categories.
4. Shinyanga's 255 households, with an average of six household members each, have a population of 1,530. With official per capita income at $242, it can be said that Busongo's total average income is $370,260. Including the component from non-cash forest income, the per capita income comes to $310 ($242 + $68) and the total for Busongo is $474,300. How is that sum split between the different wealth categories?

These calculations can be used to show what proportion of total household income, expressed in monetary terms, comes from forest for households in different wealth categories.

Wealth Rank categories of HHs in Busongo	No. HHs	% of Busongo income owned by each wealth category	Proportion of all Busongo income in $$	Income Per HH	Income Per cap.
Rich HHs	18	28	132,804	7,378	12,300
Middling	29	22	104,346	3,598	600
Wealth Ranking of HHs in Busongo	**No. HHs**	**% of all Busongo income**	**Proportion of all Busongo income in $$**	**Income Per HH**	**Income Per cap.**
Poor	150	42	199,206	1,328	221
V.poor	58	8	37,944	654	109
TOTALS	255	100	474,300		

WORKED EXAMPLE FROM MADAGASCAR

South-East

What is the overall dependence on forest products for all residents (poorer and richer, men and women) of both villages?

In Ambinanindrano and Ampasipotsy there are a total of 220 households (from Tool 1), which have been classified by local people into categories of richer (*Rich + Middling*) and poorer (*Poor + Very Poor*). We assume an equal distribution of men and women in the two wealth categories. Different wealth and gender classes within the two villages have a different split between cash and non-cash income and between forestry and non-forestry (agriculture + other) revenues. Using the percentage of households in each of these four groups in the two villages, it is possible to calculate overall figures for the importance of forest products to cash, non-cash and total income.

How do we apply a monetary value to these percentages?

The average income of rural households in Vatovavy Fitovinany Region was 215,536 Ariary in 2005 (Source: l'Enquête Periodique Ménages 2005, INSTAT-DSM) and is expected to be similar in 2008. This figure includes both cash and non-cash income. The Enquête Periodique Ménages 2005 estimated that non-cash income from agriculture accounts for about 30% of total household income, which is comparable to the finding in this study

ESTIMATION OF OVERALL VALUE OF FOREST PRODUCTS TO ALL RESIDENTS IN AMBINANINDRANO AND AMPASIPOTSY

	Ambinanindrano				Ampasipotsy				
	PW	PM	RW	RM	PW	PM	RW	RM	Total
Number of households	57	57	22	22	20	20	11	11	220
% total hhs in the two villages	26%	26%	10%	10%	9%	9%	5%	5%	100%
% income that is non-cash	57.5%	60%	35%	71.5%	65%	70%	37%	66.5%	58.5%
% forestry contribution to non-cash income	45%	36%	23%	23%	39%	38%	40%	40%	37%
% forestry contribution to cash income	5%	7%	30%	4%	22%	9%	6%	16%	10%
% forestry contribution to total income	28%	25%	27%	17%	33%	29%	19%	32%	26%

Wealth Rank categories of HHs Ambinanindrano and Ampasipotsy (Mizilo)		Column 1 Ave. No of Cattle (score 1 per head)	Column 2 Ha. of land (score 3 per ha)	Column 1+2 Wealth Score	Wealth score x no. of HHs	% of village income owned by each wealth category	Annual household income (cash + subsistence) in Ariary	Annual value of forest products to household in Ariary
Rich	17	4	4 x 3 =12	16	272	23.5	655,480	150,760
Middling	48	2	2,25 x 3 =6.75	8,75	420	36.5	360,574	82,930
Poor	148	0	1 x 3 = 3	3	444	39	124,950	34,990
Very Poor	7	0	0,5 x 3 = 1.5	1,5	10.5	1	67,740	18,970

that non-cash contributions from agriculture account for from 22% to 55% of total household incomes, with an overall contribution to all households of 37%.

However, the Enquête Periodique Ménages 2005 estimates the contribution of non-cash income from non-agricultural enterprises, including forestry, at only 0.2% of total household income, whereas the estimate in this study is 21% (proportion of income that is non-cash x proportion of forestry's contribution to non-cash income). There are several possible explanations for this difference, including (a) the EPM definition of agricultural products includes some of the products that the Forests-Poverty Toolkit defines as forest products, such as fruits, (b) the EPM figure includes urban households, which are expected to have a lower dependency on forest products, (c) the questions in the EPM do not extract the full range of forest products that are recorded in the Forests-Poverty Toolkit.

If the total household income in Vatovavy Fitovinany Region is 215,536 Ariary per year and forest products contribute 26% of this income (cash + non-cash) then the annual contribution from forestry to each household is 56,039 Ariary (approximately US$35).

However, it is not possible, from an average figure of the two villages, to estimate the respective financial contribution of forests for the richer and the poorer.

1. In the initial classification of households by wealth/social class, the team established that there was a total of 220 households (158 Ambinanindrano, 62 Ampasipotsy), of which 17 (12+5) were *Rich*, 44 (31+13) *Middling*, 147 (111+36) *Poor*, and 7 (4+3) *Very Poor*.
2. The team also recorded the average number of livestock and the average cultivation area (paddy fields + dryland fields) for each of those classes, as indicators.
3. On that basis, a simple scoring system was devised to establish a "wealth score" for each class, to provide an indication of wealth distribution among the four classes.
4. If the total income of the two villages is 47,417,920 Ariary per year (215,536 x 220), the mean income can be estimated separately for each wealth class by dividing total income proportionately among the four classes.
5. The contribution of forestry can then be calculated separately for the four classes using the percentage of total income from forestry for the richer group (23%; *Rich* and *Middling*) and the poorer group (28%; *Poor* and *Very Poor*).

North-West

What is the overall dependence on forest products for all residents (poorer and richer, men and women) of both villages?

In Ambodimanga and Ambodibonara there are a total of 278 households (from Tool 1), which have been classified by local people into categories of richer (Rich + Middling) and poorer (Poor + Very Poor). We assume an equal distribution of men and women in the two wealth catego-

ESTIMATION OF OVERALL VALUE OF FOREST PRODUCTS TO ALL RESIDENTS IN AMBODIMANGA AND AMBODIBONARA

	Ambodimanga				Ambodibonara				
	PW	PM	RW	RM	PW	PM	RW	RM	Total
Number of households	72	72	18	18	39	39	10	10	278
% total hhs in the two villages	26%	26%	6%	6%	14%	14%	4%	4%	100%
% income that is non-cash	72%	73%	79%	74%	72%	53%	46%	37%	68%
% forestry contribution to non-cash income	40%	20%	12%	43%	52%	41%	43%	52%	36%
% forestry contribution to cash income	26%	29%	23%	11%	13%	9%	23%	15%	21%
% forestry contribution to total income	37%	22%	14%	35%	37%	26%	33%	38%	30%

ries. Different wealth and gender classes within the two villages have a different split between cash and non-cash income and between forestry and non-forestry (agriculture + other) revenues. Using the percentage of households in each of these four groups in the two villages, it is possible to calculate overall figures for the importance of forest products to cash, non-cash and total income.

How do we apply a monetary value to these percentages?

The average income of rural households in Sofia Region was 225,240 Ariary in 2005 (Source : l'Enquête Periodique Ménages 2005, INSTAT-DSM) and is expected to be similar in 2008. This figure includes both cash and non-cash income. The Enquête Periodique Ménages 2005 estimated that non-cash income from agriculture accounts for about 30% of total household income, which is comparable to the finding in this study that non-cash contributions from agriculture account for from 30% to 70% of total household incomes, with an overall contribution to all households of 45%.

However, the Enquête Periodique Ménages 2005 estimates the contribution of non-cash income from non-agricultural enterprises, including forestry, at only 0.2% of total household income, whereas the estimate in this study is 20% (proportion of income that is non-cash x proportion of forestry's contribution to non-cash income). There are several possible explanations for this difference, including (a) the EPM definition of agricultural products includes some of the products that the Forests-Poverty Toolkit defines as forest products, such as fruits, (b) the EPM figure includes urban households, which are expected to have a lower dependency on forest products, (c) the questions in the EPM do not draw out the full range of forest products that are recorded in the Forests-Poverty Toolkit.

If the total household income in Vatovavy Fitovinany Region is 225,240 Ariary per year and forest products contribute 30% of this income (cash + non-cash) then the annual contribution from forestry to each household is 67,572 Ariary (approximately US$42).

However, it is not possible, from an average figure of the two villages, to estimate the respective financial contribution of forests for the richer and the poorer.

1. In the initial classification of households by wealth/social class, the team established that there was a total of 278 households (180 Ambodimanga, 98 Ambodibonara), of which 8 (4+4) were *Rich*, 49 (32+17) *Middling*, 151 (96+55) *Poor*, and 70 (48+22) *Very Poor*.

Wealth Rank categories of HHs Ambodimanaga and Ambodibonara		Column 1 Ave. No of Cattle (score 1 per head)	Column 2 Ha. of land (score 3 per ha)	Column 1+2 Wealth Score	Wealth score x no. of HHs	% of village income owned by each wealth category	Annual household income (cash + sub-sistence) in Ariary	Annual value of forest products to house-hold in Ariary
Rich	8	15	3 x 3 =9	24	192	18	1,408,880	394,490
Middling	49	4	1.5 x 3 =4.5	8,5	416,5	40	511,160	143,120
Poor	151	1	0.5 x 3 = 1.5	2,5	377,5	36	149,280	44,790
Very Poor	70	0	0,3 x 3 = 0.9	1	70	6	53,670	16,100

2. The team also recorded the average number of livestock and the average cultivation area for each of those classes, as indicators.
3. On that basis, a simple scoring system was devised to establish a "wealth score" for each class, to provide an indication of wealth distribution among the four classes.
4. If the total income of the two villages is 62,616,720 Ariary per year (225,240 x 278), the mean income can be estimated separately for each wealth class by dividing total income proportionately among the four classes.
5. The contribution of forestry can then be calculated separately for the four classes using the percentage of total income from forestry for the richer group (28%) for the *Rich* and *Middling* and the poorer group (30%) for the *Poor* and *Very Poor*.

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POVERTY-FORESTS LINKAGES
TOOLKIT

S A M P L E

POLICY BRIEF

POVERTY-FORESTS LINKAGES IN **UGANDA**

SEE OVERVIEW AND NATIONAL LEVEL ENGAGEMENT, SECTION 3 (P. 35)

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EXECUTIVE SUMMARY

This policy brief paper was prepared following the testing of the ***Poverty-Forests Linkages Toolkit*** at four sites in Masindi, Kabale and Kisoro Districts of Uganda. In addition to gathering information on the linkage between forests and poverty, the toolkit produced evidence to inform national planning processes, including the formulation of the 5-year National Development Plan. Eight key findings, all of which have national policy relevance, can be highlighted.

1. First, a key finding was that rural communities do not use the $1 standard available for daily expenditure to gauge poverty. Instead they use a package of indicators thereby demonstrating the complex and multi-dimensional nature of rural poverty. By implication, poverty eradication requires a holistic and integrated approach to rural development, including its assessment. Access, by rural communities, to natural resource assets, including forests, is central to any poverty reduction strategy for Uganda.

2. The subsistence economy was found to be 52%, slightly higher than the cash economy at 48% for all sites in this study. But compared to agricultural crops, which command a 1:1 ratio between the subsistence and cash economy, the forest products ratio of 3:1 implies that they are mainly used for subsistence. This phenomenon makes them almost invisible in the Poverty Reduction Strategy of the country, one of whose key objectives has been "to increase the ability of the poor to raise their incomes".

3. Although the monetary (cash) contribution to households from forest products was only 8% for the four sites, some groups and some sites registered a much higher contribution. This was true among the very poor/poor men and women of Ncundura at 19% and 15% respectively, and among the very poor/poor men in Muhindura at 20%. On the contrary, the dependency on forest products by the average wealthy, both men and women for cash is lower, at 6%. Forest products therefore constitute an importance direct source of income for the very poorest. As households become better off, their dependence on forest products starts to decline.

4. In Kisoro and Kabale, the former forest indigenous Abatwa have not been fully resettled. Unless government takes a bold position to settle them, their continued dependence on forests for their livelihood could in the long-run be very counter productive to sustainable forest management.

5. Forest linkages to the growth of other sectors such as crop production, livestock rearing, construction, trade and health were considerable although there is no national system to capture such linkages. This under estimates the contribution of forests/forest products to national development. Their contribution to the attainment of Millennium Development Goals (MDGs) would be higher if communities had access to appropriate and affordable technologies for value addition such as honey and timber processing.

The improvement in rural physical infrastructure (e.g. roads, electricity) and provision of social services (e.g. education and health services) would also contribute to rural transformation.

6. In Masindi, large areas of private natural forest were found to be under pressure from commercial agriculture. Government needs to identify a package of incentives including carbon finance so that households with private natural forests can conserve them instead of converting them to agriculture.

7. Between 1971-1986, communities witnessed over exploitation of forest products due to (i) the trans-border illegal trade known as *"Magyendo"* and (ii) institutional breakdown,of the then Forestry Department (now National Forestry Authority) and local authorities. The main policy message is that poor governance and break-down of the rule of law has negative repercussion for rural livelihoods .

8. A key finding from the listing of duties among communities is the desire for sustainability. This represents a considerable opportunity for the promotion of co-management arrangements in forestry between government authorities and the communities. Using the Poverty-Forests Toolkit, communities can generate information to guide their participation in sustainable forest management. The formulation of the 5-year National Development Plan should take cognizant of the findings in this paper, more so given that it has a developmental objective *"to develop and optimally exploit the natural resource base and ensure environmental and economic sustainability"*.

FIGURE 1 **THE POOR WOMEN RANK FORESTS IN LIVELIHOODS**

INTRODUCTION

Uganda's Progress Report (2007) on the Millennium Development Goals (MDGs) has asserted that forests and woodlands are critical to the protection of the Ugandan landscape and are vital to people's livelihoods. A wide range of products and ecological services are provided on which the poor depend for employment and economic growth. Nationally, forests and woodlands are estimated to cover 20% of the country's area. Of this, 70% is on private farmland with the balance being in Central and local forest reserves, national parks and wildlife reserves. However, the conversion of land for agriculture, together with policy failures and a lack of alternative energy sources has led to over-harvesting of trees and forest loss, especially on private farmland.

No doubt that deforestation results in increased poverty through higher fuel wood (firewood and charcoal) costs, both in terms of money and time spent in collection. According to the Poverty Eradication Action Plan (PEAP) 2004/5, the distance traveled, particularly by women and children, to collect firewood has increased dramatically between 1992 and 2002 from 0.06km to 0.73km. This impacts negatively on household productivity since the time spent on collecting firewood could have been used for other economic activities.

There is considerable rationale for the government to place the natural resource base as a central issue for development in general. First, there is the need to curb the degradation described above, but second, is to recognize the contribution that forests and woodlands can make to the livelihoods and transformation of households and the economy in general. The competing interests to conserve forests on one hand and to convert them to alterna-

tive uses like sugar cane production, industrialization and settlement on the other raises the urgency to make informed trade-off choices.

Presently, little evidence has been generated to demonstrate how forest products used in combination with other livelihood assets sustain rural livelihoods. Unless this is systematically done over time as a good practice of planning and forest governance, forests will continue to be out-competed in resource allocation from government and its supporters.

Against this background, a partnership of institutions[1] has supported Uganda alongside Cameroon, Ghana and Madagascar to test a field-based research methodology to:

(i) gather evidence on the linkage between forests and poverty, and
(ii) use that evidence to inform and influence national and sectoral level planning processes.

The methodology is fully described in a separate PROFOR Poverty-Forests Linkages Toolkit, available on: *http://www.profor.info/profor/node/103*. Although the Toolkit was being tested, it nonetheless generated important findings worthy of sharing among policy makers. The testing was done in 2007/8 in two sites in Masindi district and one site in each of Kabale and Kisoro Districts of Uganda. Overall, the paper presents the contribution of forests products to rural livelihoods in the context of their wider rural economy in which communities find themselves.

This Chapter has provided the introduction to the study. Chapter 2 gives the toolkit approach and chapter 3 gives the social, economic and political setting of the four sites for the study. Chapter 4 summarizes the contribution of forests to livelihoods, while Chapter 5 analyses their contribution to the Millennium Development Goals (MDGs).

1 PROFOR, IIED, ODI and CIDT, Wolverhampton, UK

Chapter 6 reviews the communities' perceived rights, responsibilities and benefits as well as the problems and solutions in the use of forest products. Finally, chapter 7 provides conclusion and major policy recommendations.

THE POVERTY-FORESTS TOOLKIT APPROACH

This report is based on the Poverty-Forests Toolkit which has several methodologies for snap-shot information gathering. They are (i) wealth ranking, (ii) local landscape and situational analysis, (iii) timeline and trend analysis, (iv) livelihood analysis, (v) assessment of user rights, duties and benefits and (vi) forest problem and solution matrix. Table 1 summarizes the main features of each tool. The use of these tools helps to generate evidence on subsistence and cash use not only for forest products but also crops, livestock and other sources of livelihood. They also generate information about communities' perceived rights, responsibilities and benefits as well as problems and solutions for forestry management. Collectively, the tools communicate the **Voices of the Poor** concerning

FIGURE 2 **WOODY BIOMASS DISTRIBUTION IN UGANDA**

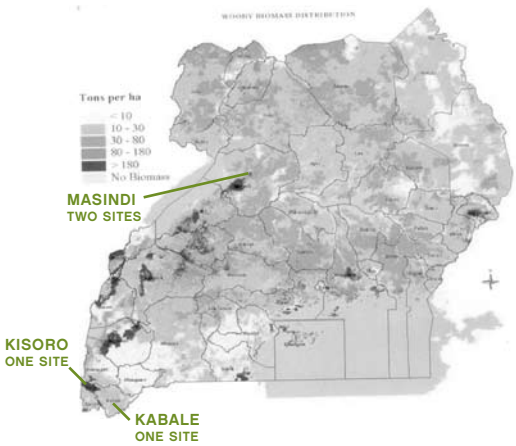

TABLE 1 **OVERVIEW OF THE TOOLS USED TO GATHER EVIDENCE ON USE OF FOREST PRODUCTS**

Tool	What it is
1. Wealth ranking	A way to discuss perception of well-being and poverty and to classify households in relation to degrees of well-being.
2. Local landscape and situational analysis	An informal tool that reveals the sense of way in which the landscape and its resources are used by the local people and the rules they apply.
3. Time-line and trend analysis	A way to discuss positive and negative changes that have affected people's well-being over time.
4. Livelihood analysis	A tool to analyse the circumstances and survival strategies of individual households.
5. ser rights, duties and benefits	A way to gauge households perceived rights to a resource, the responsibilities they have to look after the resource and the benefits they are deriving.
6. Forest problem and solution matrix	A tool to enlist the major problems of forest management as perceived by households, and the solutions they propose against each problem.

forestry use for rural livelihoods. The toolkit was used in four sites, two of which were in Masindi (Nyantonzi and Kasenene parishes), one in Kisoro (Muhindura parish) and the last one in Kabale (Ncundura parish). See Figure 2. Figure 1 is an illustration in the application of one of the tools, the livelihood analysis tool. By their nature, these methodologies generate qualitative data. Accordingly, the evidence they generated has been complemented with quantitative data from other surveys and studies.

SOCIO-ECONOMIC AND POLITICAL SETTINGS OF THE STUDY SITES

NATIONAL ESTIMATES OF WEALTH

It is imperative for one to briefly understand the context in which communities' wealth ranking should be construed. Uganda's political and administrative management is operated through a local government system constituted by districts and sub-counties in rural areas and municipalities, town councils, divisions and wards in urban settings. The Districts and Sub-counties have powers for planning under a decentralized system. The main economic activities common to all the study sites are agriculture and livestock rearing. In addition, Masindi has small-scale industries e.g. milling, furniture making and pit-sawing. All sites are hard-to-reach areas for the roads leading to them are poor (murram roads) which become impassable in the rainy season.

Population density in Kabale and Kisoro are very high by national standards, explaining why the forest area per capita (ha) is also lower than national average (Table 2). All sites have a Human Development Index (HDI) below the national one, and wood fuel energy dependency above the national one, both of which indicate the relative poverty of these communities. Of the three districts, Kisoro is the poorest by its human poverty index ranking

THE COMMUNITIES' RANKING OF WEALTH

Using the wealth ranking tool, the study team facilitated the communities in the four study sites to rank households by 4 categories of: 'very poor', 'poor', 'average wealthy' and 'wealthy'. The common indicators proposed by the study team for comparability were land ownership, land size, livestock ownership, ownership of other assets,

TABLE 2 **DEMOGRAPHIC AND WELFARE INDICATORS FOR MASINDI, KABALE AND KISORO DISTRICTS**

Indicator	National Average	DISTRICT AVERAGE		
		Masindi * 1	Kabale * 2	Kisoro * 3
1. Population Density (persons/ sq Km)	123	54.4	281.1	324
2. Human Development Index	0.581	0.524	0.567	0.495
3. Human Poverty Index	27.69	29.4	24.0	40.2
4. Economic activity indicators % working population in subsistence farms	30.7	25.8	23.9	15
5. Energy consumption (%) Cooking (wood fuel)	96	97.3	97.3	97.3
6. Forest area per capita (Ha)	0.053	0.19	0.009	0.018

*1- Nyantonzi and Kasenene parishes *2- Ncundura parish *3- Muhindura parish

and quality of housing and sources of income. However, communities generated additional indicators, notably education and non-cash sources of livelihood (Nyantonzi), social behaviour and clothing (Kasenene), education and capacity to employ (Muhindura) and education and health (Ncundura) thereby bringing out the multi-dimensional aspect of poverty. In Muhindura-Kisoro district community members observed during landscape situation analysis: *"Families which reap big from agricultural produce but fail to send children to school cannot be considered wealthy"*.

Although there is some variation among sites (Figure 3), the general picture across all sites is that 28% of the households were very poor, 47% were poor, 21% average wealthy and only 4% are wealthy. If one combines the first two categories, 75% of the households are very poor/poor. These findings are consistent with other studies. For example, it is stated that although progress has been registered in reducing the percentage of population below the poverty line from 56% in 1992 to 31% in 2006, the disproportionate contribution of rural areas where 88% of the population lives to national poverty remains high, at 93% [UNDP, 2007 pg 12]. Many households also remain vulnerable to poverty [Okidi & McKay, 2003].

The key lessons from the use of the wealth ranking tool were that (i) the variables by which households rank wealth vary by location although the main indicators remain consistent, (ii) households value a package rather than one variable for their socio-economic transformation and (iii) while it is fairly straight forward to count the number of people living on the equivalent of US$1 per day, it is more demanding to determine the true nature and extent of poverty using the wealth ranking tool.

The main policy message is that the complex and multi-dimensional nature of rural poverty in Uganda requires a holistic and integrated approach to rural development, including its assessment.

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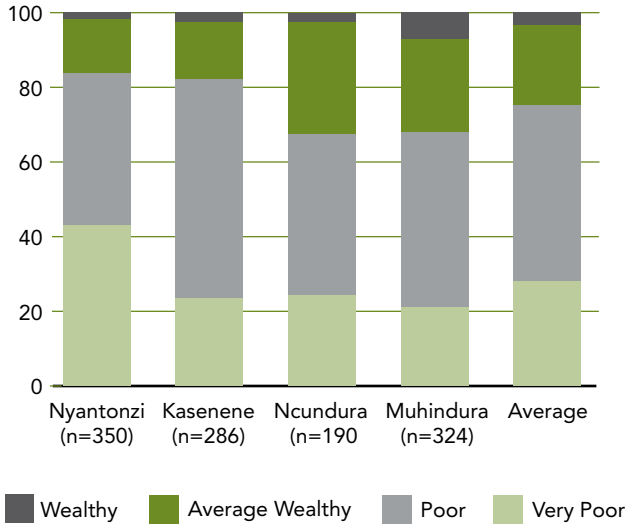
ACCESS TO FOREST PRODUCTS

Masindi District – high forest cover

Masindi households generally have larger parcels of land and more trees compared to those in Kabale and Kisoro. A few individuals in Masindi retain natural forests on their land, although some of them are converting them to commercial agriculture (Figure 4). Government should explore the possibility of integrating such households into carbon market to give them incentives to conserve

FIGURE 3 **WEALTH RANKING BY HOUSEHOLDS IN FOUR SITES**



their natural private forests. A large section of Budongo forest area has gradually changed over the past 60 years from tropical high forests to a mixed type forest due to selective logging and widespread silviculture, which favoured the growth of valuable timber species such as mahogany (Muhereza, 2003). There is a slow attrition of forest patches that form part of the larger Budongo forest ecosystem.

Government needs to identify a package of incentives including carbon finance so that households with big chunks of private natural forests in Masindi and elsewhere utilize them sustainably and wisely for the common good instead of converting them to agriculture.

The private forest patches are under continuous pressure from other land uses, e.g. large sugar cane plantations

FIGURE 4 **PRIVATE NATURAL FOREST BEING CONVERTED TO SUGARCANE PLANTATION IN MASINDI**

associated with the Kinyara Sugar Works, tobacco, food crop cultivation and land for human settlement.

Migrants from the Democratic Republic of Congo (DRC) are encroaching on the southern fringes of the forest. Most migrants are seasonal farmers who clear land near the forest for producing tobacco and return to DRC after selling their tobacco (Muhereza, 2003)

Kabale and Kisoro Districts – low forest cover

In Kabale and Kisoro, the low forest cover on farmland is visible. The communities of Ncundura (Kabale) and Muhindura (Kisoro) therefore rely on harvesting forest products from Echuya Forest Reserve. The reserve was gazetted in 1939 and was mainly bamboo forest with very few hardwood trees at that time. However, the current ecological situation shows that hardwood trees have been colonizing the bamboo forest, with the area of pure hardwood stands having increased from 16% to 51%. The exclusion of fire, herbivores and human activities after reservation of the forest has gradually led to the conversion of the grassland bamboo ecosystem into a hardwood forest ecosystem.

Previously the use of forest resources was policed by the NFA but this proved impossible to supervise due to population pressure. That pressure is reflected in the fact that households cultivate to the margin of the reserve. Now the community right to access and obligation to protect the forest is delivered under a series of community forest management agreements.

TIMELINE AND TREND ANALYSIS

The use of timeline tool gave quite interesting revelations. Across all the sites, the break-down of the rule of law (1971-1985) was responsible for encroachment, illegal harvesting of forest products and breakdown of the capacity of institutions (Forest Department and Local governments). In Kisoro and Kabale, the illegal trade, then locally known as 'Magyendo' led to timber harvesting and charcoal production for export to Rwanda. In the same areas, the size of land holding reduced tremendously due to population growth, thereby creating fragmentation. As a coping mechanism, some households rent land from those who have more. Livestock grazing is constrained in this part of the country. The promotion of trade liberalization and privatization led to the collapse of local institutions and cooperatives for collective marketing.

The main policy message is that poor governance (constitutionalism, accountability, transparency in decision making human rights at all levels) and break-down of the rule of law has negative repercussion for rural livelihoods and their transformation

It would have been difficult for many households to meet their food security and commercial needs in agriculture had it not been that Non-Governmental Organisations (NGOs) and research institutions like Africare, CARE, Africa 2000 Network, ICRAF introduced high yielding varieties of Irish potatoes, beans and temperate fruits. They also introduced soil and water conservation techniques, agro-forestry and collaborative forests management. The uncertainty being expressed because of weather variability in recent years is a problem for which communities have not sought sustainable coping mechanisms. Communities attribute prolonged and unpredictable drought and erratic rainy seasons to deforestation. In Masindi on the other hand, the demand for sugar cane from out growers by Kinyara Sugar Works Ltd and tobacco by British American Tobacco Ltd have led to conversion of forests to agriculture.

In its World Development Report for 2008 entitled "Agriculture for Development", the World Bank has stated that agriculture contributes to development as an economic activity, as a livelihood, and as a provider of environmental services, making it unique instrument for development (World Bank 2007). It continues to state that, managing the connections among agriculture, natural resource conservation and environment must be

an integral part of using agriculture for development. Accordingly, donors and governments should re-discover the importance of forests and trees for poverty eradication and especially on private farmland.

In all sites, there was appreciation by communities that government is investing in Universal Primary Education (UPE) and Universal Secondary Education (USE). There is also increasing access to the mobile telephone. Unfortunately, all sites do not have access to electricity, a factor holding them back in small and medium processing enterprises. The roads are also still very poor, although the study team left at a time when the construction of Kisoro road was commencing. Women's participation in decision making, including use of household assets has improved particularly after coming into power of the current government in 1986.

The key message is that improvement in rural physical infrastructure (e.g roads, electricity) and provision of social services (e.g education and health services) would greatly contribute to rural transformation.

Since the 1970s, communities have witnessed changes which point to the increasing scarcity of forest products. Abundance is decreasing due to high population growth rates, immigration and liberalized trade. The speculative and illegal trade in the 1970s and early 1980s in Kisoro and Kabale districts, known as *"Magendo"*, made the export of both firewood and charcoal to Rwanda lucrative but at the expense of forest management. Fuel wood is now scarce and expensive. Households are coping with this scarcity by planting tree species on their private landholdings. Many NGOs (e.g. Nature Uganda, ECOTRUST, Africa 2000 Network and BUCODO) as well as the NFA are educating communities on the sustainable use of forests.

Another observed feature is that land parcel sizes have fallen across all sites, with purchase and renting prices and land conflicts on the increase. Sustainable agricultural practices like *"Hinga-Raza"* type of fallowing and terracing of the 1960s have declined due to poor enforcement and weakened extension service. The recently introduced soil and water conservation technologies like *"fanya juu/ fanya chini"*, agro-forestry and zero grazing have not yet yielded benefits on a scale to offset the losses incurred over the long term.

Communities mentioned recent developments which if harnessed would add value to the rural economies, including the use of forest products. Women are equally entitled as men to access forest products on a regulated basis from CFR under the introduced community resource management programme of the NFA. The National Agricultural Advisory Services (NAADS), which is a publicly funded but privately run extension service and NGOs are training farmers and providing new technologies. Women's voices in decision making are starting to be heard. The poor women in Kisoro commented: *"Men these days consult us before selling land"*. With the introduction of Universal Primary Education and Universal Secondary Education, it is hoped that many households will have the capacity either to adopt better practices for agriculture and forestry husbandry or to leave land in preference for paid employment. The adoption of high yielding Zero grazing cattle and ruminants by women is a great opportunity because ownership of livestock generally has been found to account for families coming out of poverty four times faster than those purely dependent on food crops [MFPED 2005]. The expansion of the mobile phone also provides an opportunity to access information on markets by farmers.

However, government is still challenged to improve the enabling environment for rural economic transformation. The poor road infrastructure frustrates trade and marketing especially in the rainy season. The lack of electricity and other low-cost alternative energy sources continue to lead to the over-use of forests for household energy. Introduction of rice growing in Masindi is likely to lead to the reclamation of wetlands unless proper guidance is

provided. The improvement in the health service should equally be used to help households cope with HIV/AIDS and its impact on agriculture and forestry.

FOREST PRODUCTS' CONTRIBUTIONS TO RURAL LIVELIHOODS

This study has brought to light the fact that forests and forest products constitute a very large asset base for livelihood strategies, accounting for 30% of households' livelihoods on average over the four study sites. The subsistence use of forest products is 22% compared to 8% for cash income. They are rivaled only by agricultural crops, which contribute close to 50% (Figure 5). These figures are reasonably consistent with another study (Bush et al., 2006), which found that across all forest types and income groups, households derive 20% of their overall income from forests, with 76% of the value of goods harvested from forests consumed in the home. Amongst income groups, high income households appropriated a greater overall value of forest goods. Recently, the *Moving out of Poverty* study showed that 52% of the households reported improved welfare, due mainly to the accumulation of assets in land and livestock [World Bank 2007]. Communities in Masindi confirmed this observation by stating that the average wealthy people are identified by such terms as *"Ebintu biroho"*, literally meaning that they have property.

The National Household Survey 2005/2006 highlighted that 78% of the households depend on firewood for cooking and 18% on charcoal. Overall, 96% of the households depend on wood fuel for cooking purposes which is a challenge to achieving the MDG targets and promotion of environmental sustainability. Even though

FIGURE 5 **THE PROPORTION OF LIVELIHOOD SOURCES IN ALL SITES**

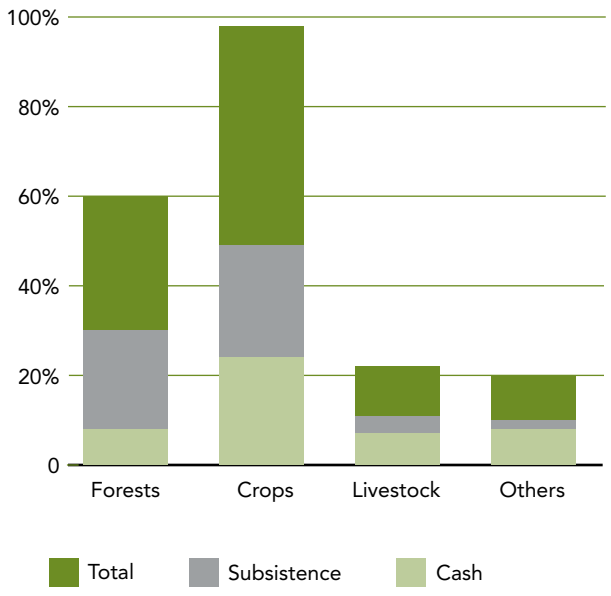
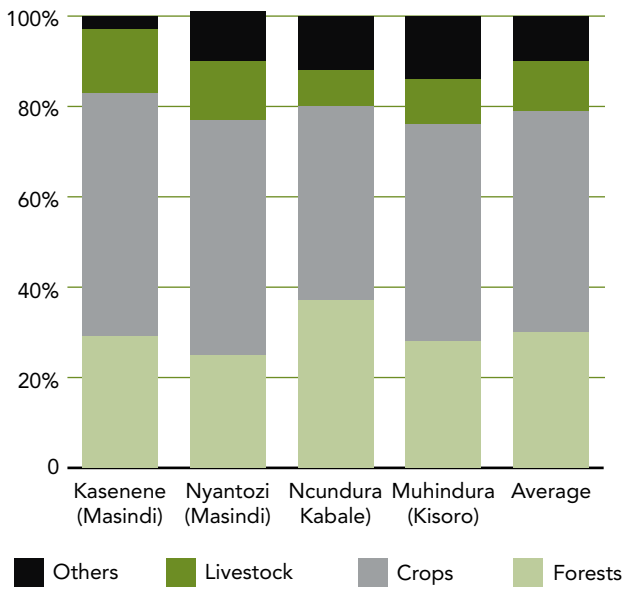


FIGURE 6 **DEPENDENCY ON FORESTS TO RURAL LIVELIHOODS**



government removed Value Added Tax (VAT) on Liquid Petroleum Gas (LPG) in 2006 to allow the poor to make substitution, it has been found that many barriers still exist to allow the poor access LPG. They are low incomes, fear of fire risk and lack of extension service on energy. (Kazoora C. *et al*, 2008).

The main policy message is that access to natural resource assets, including forests, is central to any poverty reduction strategy for Uganda.

There are other findings about forest product use specific to location, gender and wealth category. For example, across all wealth categories men derive a higher proportion (19%) than women (11%) from forest products. On the other hand, the average women's dependence on agricultural crops (55%) was higher than that of men (44%), except in Ncundura where average wealthy men's dependence on crops was exceptionally high, at 63%. This is attributed to the easy access to and prevailing market for the crop products especially Irish potatoes and cabbages that double as food and cash crops.

Ncundura's dependence on forest products is 37%, which is much higher than the 30% average for all sites (Figure 6). The dependence among the average wealthy men was also very high in Nyantonzi at 47% and Kasenene at 43% because of their low participation in crop production and relatively more abundant forest resources compared to South Western Uganda.

The subsistence economy was found to be 52%, slightly higher than the cash economy at 48% for all sites. But compared to crops, which command a 1:1 ratio between the subsistence and cash economy in the above structure, the forest products ratio is 3:1; which, implies that they are mainly used for subsistence.

The low contribution of forests products to cash income makes the forest contribution almost invisible in the Poverty Reduction Strategy of the country whose one of the key objectives has been "to increase the ability of the poor to raise their incomes".

Although the monetary contribution to households from forest products was only 8% for the four sites, some sites registered a much higher contribution. This was true among the very poor/poor men and women of Ncundura at 19% and 15% respectively, and among the very poor/poor men in Muhindura at 20%. **Forest products therefore constitute an important direct income source for the very poorest.** As households become better off, that dependence starts to decline. It was found for example, that for the average wealthy (both men and women), their dependence on forest products for cash income was 6%. Construction materials like building poles, ropes, thatch, timber and charcoal are more commonly used by men than women reflecting men's role in construction. Firewood and water command equal demand between men and women. (See Annex 1).

The very poor/poor men in Muhindura (Kisoro) heavily rely on gathering honey, wild meat and medicinal herbs for their subsistence and cash income (38%). This dependence is higher than 30% for all sites for both subsistence and cash use of forest products. Further inquiry revealed that these men were "Abatwa", an originally forest dwelling community. Most of them have no land, having been displaced from the adjacent forests of Echuya, the then Bwindi Impenetrable Forest Reserve and Mgahinga Forest Reserve in 1991 when government elevated some forest reserves to national parks. Government failure to resolve the rights of formerly dependent forest communities has also been reported in the press, particularly with regard to the Benet of Mt. Elgon National Park.

Unless government takes a bold position to settle the former forest indigenous Abatwa, their continued dependence on forests for all their livelihood could in the long run be very counter productive to sustainable forest management.

In Ncundura (Kabale) and Muhindura (Kisoro), the bamboo stems and other tree stems are important inputs into agriculture, serving as stakes for climbing beans. Compared to other beans, they are favoured for their taste, high market value and ease of cooking. Forest products therefore support agriculture in an intimate way.

Households also sell forest products to be able to meet a wide range of their expenditures. The sales from crafts meet the small everyday purchases of sugar, salt, paraffin and occasionally medium-size expenses like clothes, school uniforms. It is mainly very poor/poor women involved in these transaction. Bamboo sales cut across wealth categories for meeting small and medium expenses in Ncundura and Muhindura, where bamboo is harvested from the nearby Echuya Central Forest Reserve on a regulated basis.

On the other hand, sales from timber meet the medium to large expenses e.g. school fees, dowry and emergencies e.g. major illness. This was particularly true for average wealthy men in Nyantonzi and Kasenene where timber is legally and illegally harvested from both on-farm private forests and Budongo Forest Reserve. Forest products are widely used for many household investments. Poles and bamboos are used to construct bee-hives, homesteads and for fencing livestock.

In the dry season, some families collect fodder from forests. Timber supports small and medium enterprises in furniture making. Income derived from the sale of forest products is also used for purchase of agricultural inputs. Forest products are equally used to support community investments like construction of schools, churches, mosques, health clinics, markets and market stores. In the remote areas like Muhindura, Kisoro, they are used to make village ambulances traditionally known as "Engonzi".

Forest products offer many linkages to the growth of other sectors like crop production, livestock rearing, construction, trade and health. Due to the failure to capture such linkages, their contribution to national development is grossly under estimated at present. Authorities are called to recognize the importance of forestry resources by increasing investment in these areas.

Nonetheless, at the local level, communities appreciate all of the above values, explaining why they continue to invest in forests both at the household and community level. In the former, the common investments are tree planting and agro-forestry. In the latter, communities participate in formulating bye-laws to regulate access to forests, enforcement, boundary maintenance, enrichment planting and fire control during dry seasons. They also manage communally established woodlots (e.g. Eucalyptus woodlot in Gisasa, Muhindura), and regulate access to natural communal forest (e.g Tengele in Nyantonzi).

CONTRIBUTION OF FOREST PRODUCTS TO MILLENNIUM DEVELOPMENT GOALS

Forest products contribute, both directly and indirectly, to the attainment of the Millennium Development Goals (MDGs). Overall, across the studied communities, they contributed 8% in monetary terms to households' income, and 22% in subsistence form. Forest products are supporting local trade. It has also been studied that Uganda has 2,000-3,000 forest-based associations which span a number of different areas: forest production (timber and non-timber forest products), primary and secondary processing, enterprise support and environmental services such as ecotourism and carbon sequestrations projects (Kazoora C. *et al*, 2006). It would have been extremely difficult for the former forest dwellers, the Abatwa, to meet their food security needs had they not been gathering honey, wild meat, root-tubers and fruits

from Echuya Forest Reserve in Kisoro and Kabale Districts. They are lacking technologies to add value to these products. These examples illustrate the forest contribution to MDG1 that is the eradication of extreme poverty and hunger. In Nyantonzi, the poor men's category put it: *"A family that grows food crops and stores them in granary to last the dry season is not considered poor"*. The rugged and hilly land terrain in Kisoro and Kabale districts has always frustrated health service delivery. As a response, communities traditionally organize themselves in self-help ambulance groups known as *"Engonzi"* to carry the sick to the nearest health centre. The stretcher they use is made of forest products, thus contributing to MDGs, 4, 5 and 6, with respect to reducing child mortality, improving maternal health and combating HIV/AIDS, malaria and other diseases respectively.

Owing to the growing scarcity of forest products in some places due to population pressure, households and communities are investing in tree planting as well as regulating access to forest reserves. In so doing, they are directly contributing to environmental sustainability or MDG7. For a district like Kisoro where access to water is only 43.9% and below the national average rate of 67%, the forest's regulation of water, on which communities greatly depend, equally contributes to MDG7. Use of water harvesting technologies is not widespread.

Indirectly, the cash from the sale of forest products supports primary education (MDG2), and pays for medical expenses associated with child mortality, maternal health, combating HIV/AIDS, malaria and other diseases (MDGs 4, 5, and 6) (See Table 3).

The contribution of forests and forest products to the attainment of MDGs would have been higher if communities had access to appropriate and affordable technologies for value addition e.g. honey harvesting and processing and timber processing. This emphasizes the need for innovative research.

COMMUNITIES' UNDERSTANDING OF USER RIGHTS, DUTIES, BENEFITS AND POTENTIAL SOLUTIONS TO EXISTING PROBLEMS

The number of forest-product users was found to be many, 16 of them. The study team established from them what they considered their rights, duties and benefits related to forest product use. For each category, communities were asked to give a rating on a scale of 1 to 5, with 1 being the lowest and 5 the highest.

With respect to user rights, a major finding is that the list of products to which communities consider themselves entitled is long. This is important so as to map out strategies to reconcile the divergent and sometimes conflicting interests of resource users. The potential conflicts and management challenges that may emerge are also real. To note, communities listed alternative strategies including free access (e.g. for firewood, herbs, water, community based tourism) while for others appreciated the need for regulated access with a permit (e.g. for pit sawing, charcoal burning, collecting of crafts materials and building materials).

A key revelation from the listing of duties is the desire for sustainability. This was expressed in many ways, including cutting only dry (dead) trees for timber, selective harvesting of crafts materials, avoidance of use of fires within forests and the use of selective traps for hunting wildlife. The fact that resource users did not attach high scores is a reflection of their failed duties (e.g. abiding by the law on not hunting wild animals). Nonetheless, it is a good indicator that communities would be willing to trade duties for benefits, a key ingredient for sustainable use resource agreements.

TABLE 3 **EVIDENCE ON HOW FOREST PRODUCTS CONTRIBUTE TO ATTAINMENT OF MILLENNIUM DEVELOPMENT GOALS**

Goal	Target	Contribution to the MDG
1. Eradicate extreme poverty and hunger	Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than $ 1 a day.	Communities derive part of their incomes from forest products
	Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	It would have been difficult for marginal communities like Batwa to meet their food security needs had they not been gathering honey, wild meat, root tubers, vegetables and fruits for both subsistence and cash income
2. Achieve universal primary education	Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.	Timber, poles, thatch, sand and clay are used to build community schools Income from sale of forest products is used to contribute to education
3. Promote gender equality and empower women	Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015	Income from sale of forest products supports education of girl child.
4. Reduce child mortality	Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	Timber, poles, thatch, sand and clay are used to construct health clinics Village ambulances (called Engonzi) particularly in Muhindura-Kisoro are made of forest products Many herbs are collected to treat sickness Cash income derived from sale of forest products is used to meet health-related expenses.
5. Improve maternal heath	Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	As above
6. Combat HIV/AIDS, malaria and other diseases	Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	As above
	Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	As above
7. Ensure environmental sustainability	Target 9: Integrate the principles of sustainable development into country policies and programs, and reverse the loss of environmental resources	Both households and communities at large are investing in tree planting, regulating access to forest reserves, participating in bye-law formulation and enforcement in order ensure regular flows of benefits from forest The harvesting of fodder particularly in drought periods acts as a safety net against climatic vulnerability
	Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water	Many clean water sources are found in forests
	Target 11: Have achieved, by 2020, a significant improvement in the lives of at least 1h00 million slum dwellers	Some materials harvested from forests support construction in rural towns
8. Develop a global partnership for development	Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system	No evidence established

The generally high scores attached to benefits is an indicator of the appreciation of the values that communities derive from forest products. For example, across all the four sites, benefits from the collection of firewood, herbs, water, building materials, timber, seeds, all scored high values.

A key revelation from the listing of duties is the desire for sustainability. This represents a considerable opportunity for the promotion of co-management between government authorities and the communities concerned.

Communities identified several forest-based problems, their solutions and agencies to take the lead in addressing them. They cut across all wealth and gender groups and therefore represent an important community consensus. They have been grouped under five categories namely: (i) policy and legal problems, (ii) forest management and sustainability problems, (iii) market and trade related problems, (iv) conflict problems and (v) socio-economic and political problems.

It emerged that communities consider the existing forest legislation and regulations as too bureaucratic. They would prefer legislation that is accessible to all and more affordable charge system for forest products.

Unclear forest reserve boundaries, corruption of government officials and local leaders, low government support to forest activities and overexploitation undermine long term sustainability of the benefit flows from forest products to communities. Leaders should be held accountable for their misdeeds. Concern was also raised that conflict between the NFA and communities was rife, mainly because communities incur losses from raids by wild animals for which there are no **direct** compensation mechanisms to the affected people. The National Forestry and Tree Planting Act, 2004 is silent about this problem.

Communities feel their benefits from use of forests would be enhanced if for example, their entitlements in form of shared revenue would be timely and regular. Fiscal reforms that offer incentives to tree planting and introduction of value-addition and technologies encouraging resource users to form marketing associations were advanced as some of the solutions.

The "non-diplomatic" approach used by NFA staff was condemned by Communities as much as denying them affirmative action to allow them access to the more valued resources like timber. Even though some of the transactions like pit sawing require high capacity and expensive equipment, there could be a lee-way for communities to benefit through private sector community partnerships.

A key policy message is that communities strongly believe they have a stake in the management of forest resources, and to the extent possible, they should always be consulted. Using the Poverty-Forestry Toolkit, communities can generate information to guide their participation in sustainable forest management

CONCLUSION AND RECOMMENDATIONS

The dependence on forest products by the rural poor, especially for subsistence is enormous. Unfortunately, because of the informal nature of many of the above transactions, they are not captured in the traditional national data gathering systems like the National Household Budget Survey. This is where tools like the Poverty-Forests Linkages Toolkit can complement the existing data gathering methods. Its value as a tool would greatly be enhanced if it is repeated after some years to capture the temporal change. Nonetheless, the findings from the snap-shot use of the tool has pointed to the conclusion that the **Voices of the Poor** need to be heard in the planning processes. The 5-year National Development Plan offers a fertile entry point to incorporate the find-

ings from this study more so given that one of the developmental objectives of the plan is: *to develop and optimally exploit the natural resource base and ensure environmental and economic sustainability"* [MFPED 2007]

Based on the findings from this study, the following key recommendations are made:

(i) National Forestry Authority (NFA) and District Forestry Service should adopt the Poverty-Forests Linkage Toolkit for data gathering as an integral activity of forest management planning.

(ii) The Secretariat for the Plan for Modernization of Agriculture (PMA) should promote the planting of multi-purpose trees on private farmland through the National Agricultural Advisory Services .

(iii) The National Forestry Authority (NFA) should make accessible the regulations for harvesting the forest products from Central Forest Reserves to communities using multiple communication channels.

(iv) The Faculty of Forestry and Nature Conservation and Nyabyeya Forest College should popularize the Poverty-Forests Toolkit among its students for purposes of carrying out Rural Rapid Appraisal in planning for more in-depth research.

(v) Government should take bold steps to address the long standing problems of former forest dwelling communities, especially the Abatwa by empowering them with education, health services and income generating activities.

(vi) The donors should support the building of capacity of Non-Governmental Organisations to empower the poor voice their concerns for sustainable management of forests and adoption of multi-purpose tree species on private land to enhance ecosystem services.

(vii) Uganda Bureau of Statistics (UBOS) should include information gathering on the use of natural resources including forests when it designs Community Information Service (CIS) at sub-counties.

ANNEX 1: MAPPING OF PRIORITY SOURCES OF LIVELIHOOD BY GENDER, WEALTH CATEGORY AND LOCATION

Gender	Wealth category	Mode	1st ranking	2nd ranking	3rd ranking	4th ranking	5th ranking
KASENENE PARISH (MASINDI)							
Men	Very poor/ poor	Cash	Onions	Pigs	Poles	Rice	Firewood
		Non- Cash	Cassava	Building poles	Water	Goats	Chicken
						Maize	Beans
	Average wealthy	Cash	Tobacco	Millet	Groundnuts	Timber	Goats
		Non- Cash	Firewood Water	Cassava	Fiber (ropes)	Millet Maize	Beans
						Building poles	
Women	Very poor/ poor	Cash	Millet	Groundnuts	Maize	Cassava	Craft materials
							Pigs
		Non- Cash	Maize	Water	Firewood	Craft materials	Forest vegetables
							Cassava
	Average wealthy	Cash	Bananas/ Matooke	Sweet potatoes Tobacco	Cassava	Chicken	Millet Maize
		Non- Cash	Water	Firewood	Beans	Maize Cassava	Bananas/ Matooke
NYANTONZI PARISH (MASINDI)							
Men	Very poor/ poor	Cash	Millet	Pigs	Beans/Peas	Maize	Vegetables e.g cabbages
							Chicken
		Non- Cash	Maize	Millet Cassava	Firewood	Poles	Beans/Peas
	Average wealthy	Cash	Fruits e.g avocado, pawpaw	Pigs	Timber	Beans/Peas	Rice Tobacco
		Non- Cash	Firewood	Poles	Water	Medicinal herbs	Pineapples
						Grass	
Women	Very poor/ poor	Cash	Cassava	Maize	Beans/peas	Firewood	Rice Sweet potatoes
		Non- Cash	Petty trade	Pigs	Millet	Maize	Simsim Soya beans
	Average wealthy	Cash	Beans/Peas	Maize	Fruits	Workshops and seminars	Rice
		Non- Cash	Water	Firewood	Beans/Peas	Cassava	Sweet potatoes

Gender	Wealth category	Mode	1st ranking	2nd ranking	3rd ranking	4th ranking	5th ranking
NCUNDURA PARISH (KABALE)							
Men	Very poor/ poor	Cash	Irish potatoes	Maize	Bamboo	Construction Material	Thatch material e.g Grass
		Non- Cash	Firewood	Water	Construction Material	Goats Chicken Stakes (for beans) Bamboo	Thatch material e.g Grass Ropes (fibre)
	Average wealthy	Cash	Irish potatoes	Casual labour	Honey Cattle	Charcoal	Sheep
		Non- Cash	Firewood	Irish potatoes	Sweet potatoes	Beans	Sorghum
Women	Very poor/ poor	Cash	Irish potatoes	Casual labour	Bamboo	Petty trade	Ropes (fibre)
		Non- Cash	Firewood	Bamboo	Beans	Sweet potatoes	Maize
	Average wealthy	Cash	Casual labour	Honey Irish potatoes	Chicken	Village circles	Beans
		Non- Cash	Firewood	Irish potatoes	Sweet potatoes	Beans	Sorghum
MUHINDURA PARISH (KISORO)							
Men	Very poor/ poor	Cash	Casual labour	Irish potatoes	Bamboo	Water	Sheep
		Non- Cash	Branch wood	Water	Irish potatoes	Beans Maize	Sorghum
	Average wealthy	Cash	Irish potatoes	Poles	Shop keeping	Sorghum	Beans Goats
		Non- Cash	Irish potatoes	Beans	Fire wood	Poles Sorghum	Maize
Women	Very poor/ poor	Cash	Casual labour	Irish potatoes	Beans	Sorghum	Petty trade
		Non- Cash	Irish potatoes	Fire wood	Beans	Bamboo	Casual labour Water
	Average wealthy	Cash	Pigs	Tomatoes	Wheat	Ducks	Peas
		Non- Cash	Irish potatoes	Beans	Water	Firewood Construction materials	Stakes (for beans)

ACRONYMS

BUCODO	Budongo Forests Community Development Organisation
CFR	Central Forestry Reserves
CIDT	Centre for International Development and Training
CIS	Community Information Service
DFO	District Forestry Officer
DRC	Democratic Republic of Congo
ECOTRUST	The Environment Conservation Trust
HDI	Human Development Index
HIV/AIDS	Humane Immune Deficiency Virus /Acquired Immune Deficiency Syndrome
ICRAF	The International Centre for Research on Agroforestry
IIED	International Institute for Environment and Development
MDGs	Millennium Development Goals
MFPED	Ministry of Finance, Planning and Economic Development
NAADS	National Agricultural Advisory Services
NFA	National Forestry Authority
NGOs	Non-Governmental Organisations
ODI	Overseas Development Institute
PEAP	Poverty Eradication Action Plan
PROFOR	World Bank Program on Forests
RDC	Resident District Commissioner
UBOS	Uganda Bureau of Statistics
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UPE	Universal Primary Education
USE	Universal Secondary Education

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FURTHER INFORMATION

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