

towards
wellbeing
in
forest communities



a source book for local government

towards
wellbeing
in
forest communities
a source book for local government



© 2007 Center for International Forestry Research (CIFOR)
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior permission of the publishers.

Proper citation is requested:

Center for International Forestry Research (CIFOR) 2007
Towards wellbeing in forest communities: A source book for local government. CIFOR, Bogor, Indonesia. 90p.

ISBN: 978-979-1412-20-9

Key words: Poverty, wellbeing, local government, decentralisation, forests, community, rural development, monitoring, scenarios, GIS, mapping, indicators

This publication is a collaborative effort by the following researchers, in alphabetical order:

Marco Antonio Albornoz
Michel Becker
Ade Cahyat
Peter Cronkleton
Wil de Jong
Kristen Evans
Dante Fuentes
Christian Gönner
Rolando Haches
Michaela Haug
Ramses Iwan
Godwin Limberg
Moiria Moeliono
Eva Wollenberg

Partner institutions:

Center for Integrated Area Studies (CIAS), Kyoto University, Japan
Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung (BMZ), Germany
University of Freiburg, Germany
The Swiss Agency for Development Cooperation, Switzerland
District Government of Kutai Barat, Indonesia
District Government of Malinau, Indonesia
Municipal Government of El Sena, Bolivia

Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung (BMZ), Germany provided the funding for the research and development of this publication.

Design and layout by Kristen Evans and Gideon Suharyanto

Published by Center for International Forestry Research

Mailing address:

P.O. Box 0113 BOCBD,
Bogor 16000, Indonesia

Office address: Jl. CIFOR, Situ Gede, Sindang Barang,
Bogor Barat 16115, Indonesia

Tel.: +62 (251) 622622; Fax +62 (251) 62200

Email: cifor@cgiar.org

Website: <http://www.cifor.cgiar.org>

Contents

<i>Foreword</i>	1
<i>Introduction</i>	3
Methods	4
Sites	4
Why Pando and East Kalimantan?	4
Municipal governments and decentralisation in Bolivia	6
District governments and decentralisation in Indonesia	7
<i>Part I. Concepts</i>	9
Concepts of wellbeing and poverty	10
Poverty is a lack of wellbeing	10
Poverty is more than low income	10
Poverty and wellbeing have many dimensions	11
References and further reading	13
How can local governments influence poverty?	15
What can local government do?	15
Four steps to improve local governmental action	16
References and further reading	22
How do forests influence poverty?	23
What is poverty in forest communities?	23
Are forests safety nets, poverty traps or escape routes?	25
References and further reading	26

<i>Part II. Monitoring and Planning Tools</i>	<i>29</i>
Strategies supporting the decision making cycle of local governments	30
Monitoring	31
What is monitoring?	31
Types of monitoring	33
Indicators	33
When to monitor?	33
Who conducts monitoring?	34
Linking monitoring to planning.....	34
Participatory planning.....	35
What is participatory planning?	35
Why is participatory planning useful?	35
When and where is participatory planning done?	36
Who should participate?.....	37
Tool 1: Monitoring local poverty contexts through interactive mapping	38
What is interactive mapping?.....	38
Why is interactive mapping useful?.....	39
Interactive mapping step-by-step	40
Use interactive mapping for monitoring.....	45
Tool 2: Monitoring household wellbeing through surveys based on local indicators.....	46
What is a local wellbeing monitoring system?	46
Why is a local wellbeing monitoring system useful?	46
Wellbeing monitoring step-by-step	47
Tool 3: Evaluating local government programmes through community focus groups	64
What is community evaluation?	64
Why is community evaluation useful?	64
Community evaluation step-by-step.....	67
Tool 4: Communicating communities' needs through scenario-based planning	76
What is scenario-based planning?.....	76
Why is scenario-based planning useful?.....	76
Scenarios for planning step-by-step	78
Visioning	78
Pathways	83
<i>Final Remarks</i>	<i>90</i>

Foreword

A huge potential exists to enhance the wellbeing of forest communities, who remain among the most impoverished groups in the world. Local governments have an important role to play in meeting this potential. Across the developing world, decentralisation has given local governments new authority for decision making and commensurate responsibility for service delivery, including poverty alleviation.

Local governments, however, often lack data and information to identify causes of poverty, prioritise interventions or target specific groups of the poor. Previously bypassed by centralised planning, local governments have little experience in the preparation and implementation of local development plans. Insufficient devolution of authority, mandates without commensurate resources or weak coordination across sectors have further constrained the capacity of local governments to address local needs. Limited downward accountability has limited the political will of newly empowered authorities to act.

Development policy makers and practitioners have increased their focus on reducing poverty, raising important questions about how poverty should be measured and monitored. In the past, poverty rates have been determined by what proportion of individuals or households fail to meet minimum standards of income or nutrition. Poverty has been measured against national indicators. More holistic approaches to measuring poverty are now gaining currency. But locally relevant indicators of poverty and wellbeing have been largely unavailable.

Towards Wellbeing in Forest Communities: A Source Book for Local Government offers a refreshingly positive concept of sustained human wellbeing and security that extends beyond sufficiency of income and food. The authors draw on experience in Bolivia and Indonesia to highlight approaches for developing

locally relevant poverty monitoring and intervention. The source book should be a useful resource for local governments interested in reducing poverty through more participatory approaches with local communities. It gives particular emphasis to the potential role of forests in enhancing community wellbeing.

Part I provides a conceptual overview of poverty and wellbeing, adopting a multifaceted and dynamic perspective. It also provides an analysis of what local governments can do to reduce poverty, both directly and through advocacy to higher levels of authority or sectoral agencies. In addition, it describes factors of particular relevance to the challenge of addressing poverty in forest communities.

Part II describes four practical tools to help local governments improve the design and implementation of their poverty reduction programmes. The four tools—interactive mapping of poverty context, surveys of household wellbeing based on local indicators, community focus groups to evaluate government programmes, and scenario-based planning—are designed to address the information and capacity constraints that often prevent local authorities from making more effective interventions. The source book recognises that local governments often have little experience in eliciting meaningful community participation in planning and monitoring, and so provides step-by-step guidance on how to proceed.

The methods described in this book have been tested and refined in collaboration with forest communities in Bolivia and Indonesia. Examples from the experiences of those communities illuminate the text, and provide inspiration for those who would follow in their footsteps. This source book will prove a valuable companion for anyone who aspires to work in partnership with forest communities to reduce poverty and enhance wellbeing.

Frances Seymour
Director General, CIFOR
June 2007

My machete slipped, slicing deeply into my leg. I used my shirt to make a tourniquet and walked three hours along the forest trails to get home. My neighbour stitched the wound, but it got infected and I could not work for a month. My rice field wasn't successful—the yield is just enough for next year's seeds. My child wants to register for middle school, but there is no money. We don't receive any income from timber. Our name was used, but we never enjoyed any benefit. My wife was in labour for three days. It was our first child. On the fifth day a missionary plane flew us to the hospital 120 km away. My wife and child died before we got there. The Brazil nut harvest lasts very little time and every once in a while the production drops drastically, which makes it difficult to live off of just one product. We have rich forests but the market is so far away; what can we do? Before, with the patrón, we were poor, but he was always there whenever we needed something urgently. Now if someone gets sick, we are alone. No one notices us. We are too poor.



Quotes from people in East Kalimantan (Indonesia) and Pando (Bolivia)

Introduction

The hardships of poverty are well known to people living in natural forest areas in developing countries. Most of these people are used to the difficulties of living in remote places, far from adequate healthcare, education or cash earning opportunities. In the past, major development efforts have had difficulty reaching people who live in forested areas, and have considered the families that live there too marginal to serve.

This may be changing. Many countries have shifted their budgets and decision making responsibility to local levels of government that are located physically closer to the people and forests, such as districts, municipalities, counties or *panchayats* (village councils). In most decentralised countries, local governments now have a mandate to reduce poverty.

Local governments are well positioned to reduce the poverty of people in forests. Local governments can better understand the specific nature of poverty in their own locations and the relevant possibilities for reducing it. They have more opportunities for directly listening to and working with the poor. Local governments are often the local authority responsible for coordinating other development activities in their territory.

But local governments in forest areas face huge challenges in efforts to reduce poverty. First, they must overcome the difficulties associated with dispersed, distant populations and poor infrastructure. Second, they need to carefully balance economic development, poverty reduction and natural resources management. Third, many are still newly formed and lack the capacity, authority or means to reduce poverty effectively. Fourth, many lack adequate communication channels that would help them better understand the problems and priorities that different groups of the poor may be facing.

And last, but not least, local governments need to overcome corruption and elite capture, which often come at the expense of the poor.

Local governments could better improve wellbeing if they had reliable tools and strategies to:

- Identify the nature of local poverty
- Plan development interventions that are locally relevant
- Monitor the impact of their interventions

This source book offers four tools that local governments can use to better understand local poverty conditions and to plan and monitor actions for reducing poverty.

While many tools exist at the national and international levels, local governments need approaches that they can adapt to their own circumstances. The tools in this source book draw on broad experiences in community planning and poverty monitoring in rural areas. They have been adapted to the forest context of our sites and should help to improve communication between local communities and local government to enable decision makers to adjust interventions to local needs, preferences and conditions. The tools are:

- Monitoring local poverty through interactive mapping
- Monitoring household wellbeing through surveys based on local indicators
- Evaluating local government programmes through community focus groups
- Communicating communities' needs through scenario-based planning.

The tools are designed to be used by local governments, but local communities, NGOs or other user groups may also find them useful. Some tools may be better suited than others for a given place. Users will want to adapt the tools to their own contexts.

The source book is organised in two parts. Part 1 provides background information on the locations where work was carried out leading to this source book, and on the methodologies used. It also introduces concepts related to poverty and wellbeing, and it briefly discusses the role of local government and forests in local people's wellbeing. Part 2 describes the four tools and shows how to use them.

The source book makes use of examples from sites in Indonesia and Bolivia, where the tools were developed and tested. Indonesia and Bolivia were selected to represent very different types of local governments in forest areas that were under differing degrees of pressure from development.

We hope that local governments, development practitioners and civil society organisations will find the tools compiled here useful for their own work.

Methods

The source book and tools were developed through repeated field tests conducted in collaboration with local governments and communities in East Kalimantan, Indonesia and Pando, Bolivia over 4 years. In East Kalimantan we worked with district administrations in Malinau and Kutai Barat, and in Pando we worked with the municipal governments in El Sena, Bolpebra and Santa Rosa.

Our efforts were part of a larger project entitled 'Making local government more responsive to the poor: Developing indicators and tools to support sustainable livelihood development under decentralisation'. The project was carried out jointly by the Center for International Forestry Research (CIFOR), the University of Freiburg and local partners in Indonesia and Bolivia to improve local governments' efforts to reduce poverty of forest-dependent people. The German Ministry for Economic Cooperation and Development (BMZ)

funded the project. The work related to the fourth tool, 'Communicating communities' needs through scenario-based planning', was jointly carried out with the project 'Stakeholders and biodiversity in the forest at the local level', financed by the Swiss Agency for Development and Cooperation.

Many of the ideas and observations in this source book are the result of activities undertaken during the course of the project. These included reviews of the literature, household surveys and community focus group discussions in Pando and East Kalimantan, workshops with local government, analysis of local government policies and actions, an international workshop on poverty and decentralisation (May 2006, Lake Constance, Germany) and thesis research by MSc and PhD students.

The tools compiled in Part 2 were successfully tested and refined during several rounds of action research in the two locations.

Sites

Why Pando and East Kalimantan?

Pando and East Kalimantan represent areas with extensive forest resources where local governments are learning to tackle poverty:

- Both regions are poor, though official poverty data are not reliable;
- Both areas are still largely covered by forest and economically dependent on forest resources;

- Decentralisation is relatively new in both countries, though Bolivia started the process almost a decade earlier than Indonesia;
- In both countries, decentralisation was aimed at promoting more public participation, although there have been mixed results in both cases;
- Both regions are remote from the country's centre and thus face problems typical of isolated rural areas;
- In both areas, CIFOR has a long-term research history that allowed a deeper understanding of the local context.

At the same time, Pando and East Kalimantan show important differences in administrative capabilities and resources. They provide a contrast in size, capacity and influence: small, poorly equipped municipalities in Bolivia compared to large relatively well-funded Indonesian districts. For example, districts in East Kalimantan had annual budgets (2003) of about US\$ 58 million (Malinau) to

US\$ 74 million (Kutai Barat) and a gross domestic product (GDP) between US\$ 56 million (Malinau) and US\$ 278 million (Kutai Barat) mainly generated by mining and forestry. The districts in Indonesia had large administrative and technical units. On the other hand, municipalities in Pando had far fewer resources in terms of budget and staff. El Sena's budget in 2003 was about US\$ 156,000, although changes in the distribution of direct tax on hydrocarbons raised the annual budget (2006) to approximately US\$ 550,000.

East Kalimantan and Pando also face different administrative challenges. People in East Kalimantan live typically in nucleated settlements, while in Pando people are more dispersed. The average population of a community is much higher in East Kalimantan (30-1000 people per community in Malinau). Communities in Pando have larger territories and their populations tend to be smaller (30-400 people per community in El Sena).

Detailed analyses of decentralisation and poverty in Pando are available in separate site reports (see Fuentes *et al.* 2005).



Municipal governments and decentralisation in Bolivia

Bolivia was one of the first countries to address negative impacts of its neo-liberal market oriented economic transition by adopting policies that encourage social inclusion. In the 1990s, the country began a decentralisation process that fundamentally changed the role of local governments through a series of policy changes that included a Municipalities Law,¹ a Popular Participation Law² and an Administrative Decentralisation Law.³ Change extended to the country's Poverty Reduction Strategy⁴ that defined key roles for municipal governments for poverty alleviation. In addition, two sectoral laws, the new Forestry Law⁵ and the Agrarian Reform Law,⁶ while not devolving much power to local government, began the recognition of tenure and forest access rights of rural people, strengthening their political and economic positions within municipal territories. Taken together, these changes set the stage for new relations between government and constituents in the country.

Bolivia's decentralised system mandates direct consultation between municipal governments

1 Law No. 696/1985, revised as Law No. 2028/1999.

2 Law No. 1551/1994.

3 Law No. 1654/1995.

4 Poverty Reduction Strategy Papers (PRSPs) are prepared by governments in low-income countries through a participatory process involving domestic stakeholders and external development partners, including the IMF and the World Bank. A PRSP describes the macroeconomic, structural and social policies and programmes that a country will pursue over several years to promote broad-based growth and reduce poverty, as well as external financing needs and the associated sources of financing.

5 Law No. 1700/1996.

6 Law No. 1715/1996.



Figure 1. Simplified administrative set up in Bolivian municipalities.

and representative community organisations. The principal administrative setup is shown in Figure 1.

While the Municipalities Law, passed in 1986, was a first step towards defining municipal governments, the 1994 Popular Participation Law created the mechanisms for funding municipal governments and for residents to participate in municipal government decision making. The law redistributes the national budget through 'coparticipation' and assigns 20% of state income to all municipalities of Bolivia. This is intended to give a clear voice to municipal residents in the allocation of funds and oversight of their use.

The autonomy of municipal governments, however, was severely curtailed by the Administrative Decentralisation Law in 1995, which assigned authority of important government functions (including education and healthcare)

to the departmental prefectures and their agencies. Important development activities aimed at poverty alleviation are now controlled by the prefecture offices and municipal governments have less influence.

In 1996, a new Forestry Law gave rural people and indigenous communities access to forests and opportunities to capture benefits from them. The law also defined new sources of income for municipal government from forest fees. The 1996 Agrarian Reform Law attempted to bring order to Bolivia's ill-defined and overlapping land tenure. Through this law and a presidential decree (DS25848) that was prepared especially for tropical forest communities, villages in Pando have the right to communal territories, equivalent in size to 500 hectares per family. This has shifted the balance of power in rural areas by prioritising community rights rather than those claimed by the regional elite, who previously controlled extensive stretches of forest land.

District governments and decentralisation in Indonesia

The reforms that followed the economic crisis (*Krismon*) of 1998 drastically changed the administrative and political landscape in Indonesia. Regional autonomy has given local governments the authority and right to make policies more autonomously⁷ and to organise their budgets independently.⁸ Districts now have full autonomy to make decisions according to local specific needs and conditions, thus allowing regional diversity. They receive



Photo by Michaela Haug

7 Law No. 22/1999.

8 Law No. 25/1999.

substantially higher budgets than before, although some of their authority has been diluted by later laws.⁹

With these reforms, expectations and hopes were high that Indonesia, and especially the country's poor, would have a brighter future. However, prices for food and basic commodities remained at a high level, while austerity measures imposed by donors made life even more difficult for the poor. Two decades of declining poverty rates were halted by the 1998 financial crisis which triggered a dramatic increase in poverty. The official figure has stagnated since 2001 at a high level, with only some slight recovery afterwards.

For remote, previously isolated and forested districts like Malinau and Kutai Barat, the potential gains from regional autonomy are especially significant. In the recent past, timber concessions were often the major source of government development assistance. However, few services reached communities and district residents were politically marginalised. Decentralisation now requires new levels of government accountability and attention to local people's needs. Government is also responsible for delivering public services, managing local natural resources and creating local revenue.

The principal administrative structure of the districts is shown in Figure 2. In contrast to the example from Pando, there is another administrative layer between communities and the districts—the subdistricts or *kecamatan*—which play a significant role in channelling or blocking community development proposals to higher government tiers.

Several tendencies in decentralisation reform have shaped districts' current interest in poverty. These include: (1) the national drive to develop and implement a Poverty Reduction Strategy, (2) national assistance programmes intended to promote food security and reduce economic vulnerability, and (3) each districts' own interest in creating self-sufficient, prosperous communities to maintain the financial viability of the district.

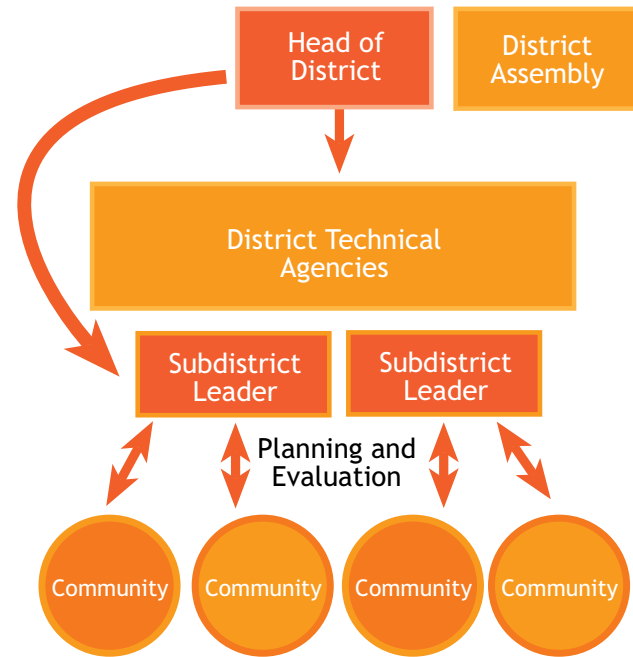


Figure 2. Simplified administrative set up in Indonesian districts.

9 Laws No. 32/2004 and No. 33/2004.

Part I.

Concepts



Concepts of wellbeing and poverty

Poverty is a lack of wellbeing

Understanding wellbeing and poverty is the first step to reducing poverty. Meaningful definitions are important in order to identify the causes of poverty, the objectives of poverty reduction, and the scope of what should be done.

Local governments need concepts of wellbeing and poverty that are locally relevant and that will help them make appropriate decisions. The concepts presented here can serve as starting points for discussions within governments and communities about poverty, wellbeing and the relationship between the two.

Declining poverty means increasing wellbeing. Both terms are interwoven and look at the same problem from two different sides. A general definition of poverty is ‘a lack of wellbeing’ and both terms are used in this source book interchangeably. For instance, if a person completely lacks wellbeing, she is in poverty. On the other hand, if she is in a state of high wellbeing, her life is characterised by prosperity, happiness and satisfaction.

Although this definition is not conventional, it is useful when trying to accommodate different national concepts and helpful when assessing and analysing various dimensions of poverty. Furthermore, ‘poverty’ often has a negative connotation of passivity, incompetence or backwardness; use of the term can be

offensive or demeaning. The term ‘wellbeing’ allows discussion of poverty in more positive terms. *Hence, ‘poverty’ should be read as ‘lack of wellbeing’ and ‘wellbeing’ as ‘reduced poverty’.*

Poverty is more than low income

For many years, being poor was defined as not having enough money. Many countries continue to measure poverty only in terms of income, consumption or access to services. Even today, one of the most well-known poverty definitions is the poverty line of a minimum income of US\$ 1 per day. The World Bank continues to use this standard for its global comparison of poverty.

Of course, money is important. It is used to pay for food, medicine and education. But money alone is not sufficient. Families could have enough income relatively, but lack access to healthcare, clean drinking water or formal education. In other cases, a family may have little cash income, but meet all of its subsistence needs. Does this automatically mean that the family is poor?

Since the mid-1980s, poverty concepts have changed from the simple consideration of income or consumption to definitions that include multiple dimensions of deprivation and wellbeing. Today, leading development organisations like the World Bank and UNDP apply poverty definitions that comprise aspects like basic needs, self-determined lifestyles, choice, assets, capabilities, social inclusion, inequality, human rights, entitlement, vulnerability, empowerment and subjective wellbeing.¹⁰

10 The capability approach was developed by Nobel Prize Laureate Amartya Sen (e.g. Sen 1993, 1997, 1999).

Poverty and wellbeing have many dimensions

Poverty is a lack of various things. It may mean a lack of sufficient income to meet household needs or shortage of assets to provide stability or cope with changes such as the loss of a job, illness or other crises. It may mean that other basic needs, such as health, education or housing, are inadequate. But poverty is also subjective, and may be caused by *feelings*, such as deprivation, vulnerability, exclusion, shame or pain. A person can feel poor if her wellbeing declines, or if she compares herself to others who are better off.

Poverty is most severe when one not only *feels* poor, but also *lacks* the means to get out of poverty. Poverty is not only ‘having no fish’, it is also ‘not knowing how to fish’, ‘not knowing where to fish’, ‘not having a net’ or ‘lacking the right to fish’. In addition, often there simply are no fish, because the pond has dried up, or has been polluted. For many poor people, capabilities, opportunities or the freedom to escape poverty do not exist: they are trapped in poverty.

To capture all these facets of poverty and wellbeing, a multidimensional concept is necessary. One approach is the Nested Spheres of Poverty (NESP) model (Gönner *et al.* 2007). In the NESP model, poverty and wellbeing are constituted by different spheres, or aspects of daily life. The central sphere of the model is *subjective wellbeing*. The core spheres that influence this subjective wellbeing are *health*, *wealth* and *knowledge*. These—and therefore indirectly also subjective wellbeing—are influenced by context spheres. By these we mean *nature*, *economic*, *social* and *political* aspects of life that directly or indirectly influence the core spheres. The context spheres, in turn, are influenced by *infrastructure* and *services*.

Graphically the NESP idea can be represented as a series of concentric circles (see Figure 3). The centre is formed by subjective wellbeing (SWB), surrounded by

core aspects of poverty, including basic needs, and the context that enables the poor to escape from poverty.

Subjective wellbeing is highly individual and emotional. It does not have a constant value, but varies with moods and circumstances. People compare their standard of living with

Box 1. Who is officially poor?

There are different approaches to officially determine poverty in a population and define who is poor. One way is to draw a poverty line. Poverty lines are often placed at the minimum level of consumption necessary to fulfil basic physical needs. Individuals below that line are considered poor. Most countries have their own definition of such a poverty line and poverty therefore is very different between countries. In order to allow cross-country comparisons, the UN and the World Bank use a number of global indices:

- The World Bank and the UN define extreme poverty as having an income of less than US\$ 1 per day in purchasing power parity.
- The Human Development Index (HDI) of UNDP measures three fields: longevity, knowledge and decent standard of living. Longevity is measured by the percentage of people who die before age 40; knowledge is measured by adult literacy combined with the gross enrolment ratio for primary, secondary and tertiary schools; and standard of living is measured by real GDP per capita.
- UNDP's Human Poverty Index (HPI1) uses the same fields, but measures standards of living in terms of access to safe water and healthcare, and by the percentage of underweight children younger than 5 years old.

that of others or with their own prior wellbeing. Personal feelings of happiness, safety, inclusion and contentedness also contribute to the overall subjective wellbeing. It also includes other forms of wellbeing like bodily wellbeing, social wellbeing, having self respect or feeling safe and secure.

The *core* of the model includes ‘basic needs’, such as food, health, housing and education. It also comprises general individual capabilities (i.e. skills and physical condition) to get out of poverty. In the NESP model, basic needs and individual capabilities are aggregated into three categories: health, adequate wealth and knowledge (both formal and informal or traditional). The core is also what most local people in the Indonesia study expressed as the principal aspects of poverty. Together with subjective wellbeing, it is a good measure of the poverty or wellbeing of a household.

Of the five *context* spheres, the *natural sphere* reflects availability and quality of natural resources. The *economic sphere* includes economic opportunities and safety nets. Aspects like social capital and cohesion, but also trust and conflicts make up the *social sphere*. The *political sphere* comprises rights and participation or representation in decision making, empowerment and freedom. The outer layer of the NESP model is the fifth context sphere, which influences the other four context spheres: *infrastructure and services*. These are mostly provided by government agencies, NGOs,

development projects and the private sector. The context is the enabling environment for supporting self-driven attempts to escape poverty and to reduce the vulnerability of falling into poverty or getting chronically trapped in poverty.

The dynamics and causality of poverty is reflected by the different layers of the NESP model. Subjective wellbeing has a very momentary nature. It often fluctuates due to many

influences. But subjective wellbeing is also correlated with the combined core aspects. Hence, improvement of core wellbeing generally leads to improved subjective wellbeing. By the same token, low wellbeing in the core usually means low subjective wellbeing.

On a longer time scale, both core wellbeing and subjective wellbeing are influenced by the context. For instance, knowledge increases as a result of improved education, health problems increase because of environmental pollution, subjective wellbeing declines due to social conflict. Hence, there is a strong causal link from the outside towards the centre.

The categories presented in the NESP model are intentionally comprehensive. They comprise basic needs as well as the condition of the enabling environment. For any given setting, a local government may wish to define the spheres and their indicators according to their own priorities. The second tool presented in this source book is a practical application

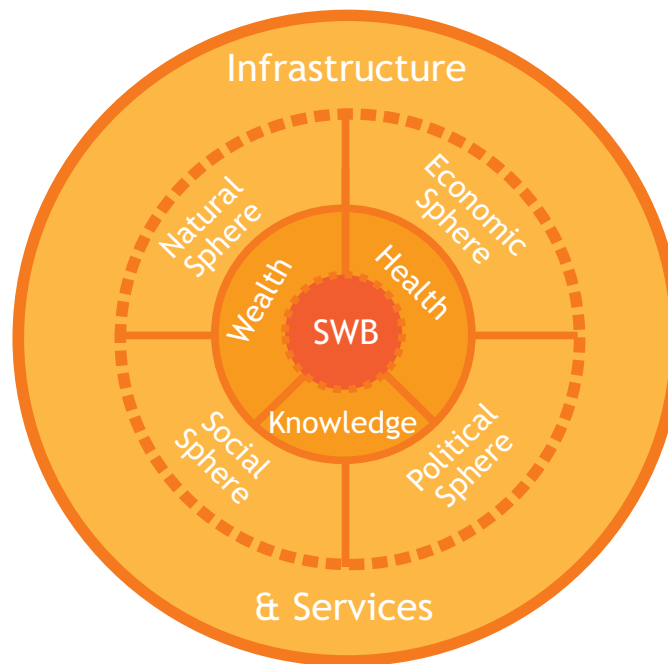


Figure 3. Nested spheres of poverty (NESP).

of the NESP model. It shows how to develop locally relevant indicators and how to visualise the condition of each wellbeing sphere, using simple colour codes. It also allows one to assess trade offs between improving one sphere (e.g. economic sphere) at the expense of another sphere (e.g. natural sphere).

References and further reading

- Angelsen, A. and Wunder, S. 2003 Exploring the forest-poverty link: key concepts, issues and research implications. Occasional Paper No. 40. CIFOR, Bogor, Indonesia.
- Barrett, C. 2006 Poverty traps and resource dynamics in smallholder agrarian systems. SAGA Working Paper. Cornell University, USA.
- Cahyat, A., Gönner, C. and Haug, M. 2007 Poverty monitoring manual. (CIFOR-BMZ Poverty and Decentralization Project.) CIFOR, Bogor, Indonesia.
- Carter, M.R. and Barrett, C.B. 2006 The economics of poverty traps and persistent poverty: an asset-based approach. *Journal of Development Studies* 42(2): 178-199.
- Chambers, R. and Conway, G.R. 1991 Sustainable rural livelihoods. Practical concepts for the 21st century. IDS Discussion Paper 296.
- Fuentes, D., Haches, R., Maldonado, R., Albornoz, M., Cronkleton, P., de Jong, W., Becker, M. 2005 Pobreza, descentralización y bosque en la amazonia boliviana. Centro Internacional para la Investigación Forestal. Editorial El País, Santa Cruz, Bolivia.
- Gönner, C., Haug, M., Cahyat, A., Wollenberg, L., de Jong, W., Limberg, G., Cronkleton, P., Moeliono, M. and Becker, M. 2007 Capturing nested spheres of poverty: a model for multi-dimensional poverty analysis and monitoring. Occasional Paper No. 46. CIFOR, Bogor, Indonesia.
- Kanbur, R. and Squire, L. 1999 The evolution of thinking about poverty: exploring the interactions. Background Paper for the World Development Report. The World Bank, Washington, DC.
- Narayan, D., Patel, R., Schafft, K., Rademacher, A. and Koch-Schulte, S. 2000 Voices of the poor: can anyone hear us? Oxford University Press for the World Bank, New York.
- Narayan, D., Chambers, R., Kaul Shah, M. and Petesch, P. 2000 Voices of the poor: crying out for change. Oxford University Press for the World Bank, New York.
- Narayan, D. and Petesch, P. 2002 Voices of the poor: from many lands. Oxford University Press for the World Bank, New York.
- Ravallion, M. [undated] How not to count the poor? A reply to Reddy and Pogge. (Available at: <http://www.columbia.edu/~sr793/wbreply.pdf>.)
- Reddy, S.G. and Pogge, T. 2005 How not to count the poor. (Available at SSRN: <http://ssrn.com/abstract=893159>.)
- Scoones, I. 1998. Sustainable rural livelihoods: a framework for analysis. Working Paper 72. Institute for Development Studies, Brighton, UK.
- Sen, A.K. 1993 Capability and well-being. *In*: Nussbaum, M.C. and Sen, A.K. (eds.) The quality of life. Clarendon Press, Oxford, UK.
- Sen, A.K. 1997 Editorial: Human capital and human capability. *In*: *World Development* 25(12): 1959-1961.
- Sen, A.K. 1999 Development as freedom. Oxford University Press, Oxford, UK.
- Streeten, P.P., Burki, S.J., ul Haq, M., Hicks, N. and Stewart, F. 1981 First things first, meeting basic human needs

in developing countries., Oxford University Press, New York.

Sumner, A. 2004 Economic wellbeing and non-economic wellbeing: a review of the meaning and measurement of poverty. WIDER Research Paper No. 2004/30. (Available at: <http://www.wider.unu.edu/publications/rps/rps2004/rp2004-030.pdf>.)

UNDP (United Nations Development Programme) 2005 Human development report. Oxford University Press, New York.

World Bank 2000/01 World development report (WDR) 2000/2001: attacking poverty. The World Bank, Washington, DC.

World Bank 2002 A sourcebook for poverty reduction strategies. The World Bank, Washington, DC.



Photo by Kristen Evans

How can local governments influence poverty?

Local governments have enormous potential to address poverty. Yet it can be difficult for them to set priorities, define strategies and take action. The following guidelines can help governments identify aspects of poverty they might attempt to influence.

What can local government do?

A local government's scope for addressing poverty is shaped by the legal framework provided by decentralisation policies, the resources available to it and decisions it makes to use these rights and resources (Box 2). It is important to determine whether the factors driving poverty can actually be influenced by local government to decide a strategy for actions.

There are many reasons why a local government that has the legal mandate and authority to address poverty, does not take effective action. The government may lack political will due to competing interests, biases or corruption and, as a result, does not prioritise poverty reduction when making decisions. The government could lack the ability to act effectively if it has insufficient resources or staff, or if the costs of action

Box 2. Scope of local governments' ability to influence poverty and obstacles to action

Local government has authority, but does not exercise it	Local government can address poverty but has no mandate under current policy	Beyond control of government
<ul style="list-style-type: none"> • Lack of willingness to enforce regulations • Low allocation of funds to poverty reduction programmes • Lack of capacity and qualified staff • Insufficient institutions or mechanisms to handle conflict • Poor communication with communities and lack of information about rural conditions. 	<ul style="list-style-type: none"> • No jurisdiction over forest resources • Lack framework for coordination with other governmental agencies • Absence of checks and balances to reduce corruption. 	<ul style="list-style-type: none"> • Natural disasters • Rugged topography • Poor soils • Volatile prices in international markets

are too great. Often, the government lacks information about local poverty; for example, it may not know where the poor are or why they are poor. Similarly, even if information about poverty is available, the local government may lack the ability to synthesise the information or design strategies to respond.

In some situations, local government could potentially address poverty, but decentralisation policies or related reforms do not provide the mandate or conditions for local government to act. For example, local government may have an interest in assisting communities to resolve conflicts over property rights or have detailed knowledge to assist with improving forest management, but may not act because it lacks jurisdiction over forest resources. Legal frameworks that determine funding for governmental agencies may channel funds generated from forest use fees and taxes to other levels of government, so that local governments have no vested interests in promoting sustainable forest management or the equitable distribution of benefits.

Although we refer to decentralisation policies, we recognise that reforms often produce larger suites of policy change that can have a direct impact on local governments. Changes in national regimes and reforms in political participation, freedom of expression, markets, land or forestry commonly accompany decentralisation. It is essential to understand these clusters of policies in order to understand the full range of action possible for local government. Unfortunately, the implications of new policies are often unclear and require time to determine how they will work and where gaps remain. Where local governments do not have legal mandates, they may need to collaborate with other agencies that do have jurisdiction, support policy reform or promote a role for civil society institutions. Local governments need to be continuously engaged with national and regional development policies and initiatives to ensure that local programmes that result are efficient and viable.

Despite the design of decentralised systems, many causes of poverty are beyond the control of local government. Examples include natural disasters, degraded resources

or prices set by international markets. In such cases, if it is apparent that local government cannot directly affect the causes, it should focus actions to mitigating the negative impacts. Local government may need to appeal to external bodies for assistance, seek alternative economic strategies or demand compensation for losses.

Where local government has a mandate and authority, immediate and direct action can be taken. Where it does not have a mandate, but does have the potential to address poverty, strategies should shift more towards collaboration and advocacy with other groups which do have the authority. Where local government is unlikely to be able to affect certain causes of poverty, preparing for or mitigating the impacts of these causes is most appropriate.

Four steps to improve local governmental action

There are four steps that local governments can take to improve their response to the poor:

1. Understand local poverty/wellbeing
2. Communicate and coordinate with the poor
3. Take actions that benefit the poor
4. Achieve a balance across different aspects of wellbeing.

These steps are based on observations of dozens of efforts by local governments around the globe.

1. Understand local poverty and wellbeing

To understand the nature of poverty in their area, local government needs answers to the following questions:

Box 3. What are local governments doing to reduce poverty in Pando?

Municipal governments in Pando are still adjusting to their new tasks and opportunities since the decentralisation reforms started. However, there are some notable successes. Municipal governments have responded to requests from villages to build water systems, school buildings and roads, and supply small electricity generators. And, although healthcare and education services are provided by agencies separate from the municipal governments, the municipal council does play a role by appointing members to oversee the implementation of these services. In the political field, municipal governments have significantly increased the participation of their constituents in municipal decision making. However, the process is still far from achieving its intended outcome.

Because of low funding, the ability of the municipal government to influence the wellbeing of families is limited. Municipalities receive funding from the national government on the basis of the size of the local population; however, it is often not possible to know the actual population. It is difficult to determine municipal populations in Pando, because of poorly defined boundaries and seasonal migration of labour during the Brazil nut harvest—some municipal populations swell to three times their 'official' population during the Brazil nut season. Even though migrants are not formal constituents of municipal governments and are not included in per capita budget allocations, local governments often have to provide them with services anyway. As the mayor of El Sena pointed out, migrants can place a significant strain on local budgets, such as healthcare costs during malaria outbreaks.

While decentralisation expands the responsibilities and power of municipal governments to help local residents, these efforts are often duplicated or dwarfed by much larger programmes carried out by the departmental government. The department's responsibilities include infrastructure, education, healthcare, natural resource management and municipal strengthening. The people heading departmental governments were, until recently, political appointees, rather than directly elected representatives of the department's population. As appointees they were notoriously unresponsive to public needs, ineffective and, in some cases, seen as corrupt. The 2005 reforms that mandated direct election of departmental governors brought widespread hope that the departmental officials would be more responsive and accountable to their electorate, although initial indications are mixed.

Local government officials meet with a CIFOR researcher at their office in Pando.



Photo by Kristen Evans

- Who is poor and where are they located?
- What are the characteristics of poverty?
- What are the local differences in the way poverty is perceived?
- What are the causes and conditions of poverty?
- What are the priorities of different groups of the poor?
- What are the current livelihoods or coping strategies of the poor?
- How well do efforts to reduce poverty work?

Understanding poverty requires learning about the poor and how development activities can help them. It also means understanding how the conditions of poverty change. These questions need to be addressed from time to time to keep local government's understanding up to date. Poor households are often adept at managing diverse livelihoods to offset risks, so development interventions should take care not to undermine these survival strategies that are working and not to generate dependency. Gathering information about poverty can be part of a monitoring and evaluation programme. Interactive mapping (Tool 1) and monitoring household wellbeing (Tool 2) are examples of tools that can be used for this purpose.

2. Communicate and coordinate with the poor

One of the biggest challenges for local government is to improve communication, interaction and coordination with the poor. In many places, the poor are the last group to receive attention, as they often have little influence in local politics, live in inaccessible areas or suffer prejudice and discrimination based on ethnicity, class or gender.

Yet, building the capabilities of the poor can lead to a strong base for later economic and political gains.

Improving communication and coordination can help local government and the poor to develop mutual understanding and constructive engagement to undertake actions together.

Open discussion with the poor should be conducted repeatedly to improve local government's understanding of poor people's priorities. The tools on community evaluation of government programmes (Tool 3) and on scenario-based planning (Tool 4) are examples of some ways to do this.

Good communication requires commitment to visit the poor in their homes, fields or in the forest. People may be more willing to express opinions in their own community than in a government office. Physical presence in places where the poor lead their daily lives helps officials to witness firsthand what the poor experience.

Measures to strengthen participation and representation of different groups of the poor and accountability to them are necessary to support the views of the poor in government decision making. Examples of such measures include holding meetings in places more accessible to the poor, instituting secret ballots to vote on decisions, or even simple actions like letting people know that they are invited to voice their opinions. Local government can then work better together with the poor to develop actions to be taken.

Explicit effort should be made to address the needs of 'invisible' groups, such as women, children, elderly and some ethnic groups that are especially at risk of being overlooked and marginalised. At the same time, care should be taken to avoid stigmatising or disempowering the disadvantaged, which could freeze them into a permanent category as 'the poor'. Conversely, poverty alleviation interventions could potentially provoke negative dynamics between impoverished subgroups if the actions are perceived as favouring one group over another, for example women over men, or one ethnic minority over other groups.

Box 4. The difficulties of making poverty a priority in Malinau

In 2004, a Poverty Alleviation Committee was created in Malinau to reduce the number of poor people in the district. In accordance with a directive from the central government, the committee was required to produce a strategic poverty alleviation plan, home district government programmes, and mainstream funds towards poverty alleviation in the budget.

The committee did not coordinate a coherent or influential poverty programme. Coordination across sectors was problematic, as the committee lacked financial resources and authority. Few members had any experience related to poverty alleviation. The committee's planning and budget recommendations were not integrated into district decision making. Most district officials saw the committee as irrelevant. The criteria for poverty were imposed by the central government and developed without consideration of local conditions in forested districts.



Photo by Michaela Haug

Meanwhile, the district's budget rose more than 200% between 2001 and 2003, with funds from the centre still contributing 69–70% of district revenues and districts generating 4–6%. The majority of the districts' budgets were used to develop the new district capitals, including government offices, civil servants' housing and other supporting infrastructure.

In 2004, the Poverty Alleviation Committee chairperson proposed 28 programmes to tackle poverty issues and these were included in the district's strategic plan. However, the programmes were not included in the budget.

*Local government office in
Malinau, East Kalimantan*

3. Take actions that benefit the poor

Local governments can influence poverty through the decisions they make. Opportunities for being more responsive to the poor arise in the planning or budget allocation process each year, as well as in how decisions are implemented. Opportunities can also appear unexpectedly. If local governments are gathering information and listening to their constituents, they will be more aware of actions that need to be taken. Effectiveness also requires the agility to respond while the opportunity is present.

Local governments can create enabling environments that provide freedom and opportunities to make the best use of people's own *capabilities* and *assets*. They can provide *support*, facilitate *cooperation* among stakeholders and reduce *vulnerability*. However, at the same time, local governments should aim at the *sustainable* improvement of wellbeing.

To respond to the needs of poor people, local governments need to make sustainable poverty reduction a priority and be aware of how the decisions that they make affect the wellbeing of people in their area. Unless reducing poverty

is made a top concern, there will always be a tendency to give attention to the concerns of more influential people.

All these principles are equally important. For example, promoting increased harvests of forest resources in a way that is not sustainable could give people more cash wealth in the short term, but place them at risk when this source of income disappears and they have no means for generating more. Reducing vulnerability through aid for food or shelter, for example, will not reduce chronic poverty; opportunities for sustainable development must be created too.

Certain actions by local government provide higher pay-offs for the poor than others. In Bolivia and Indonesia, the highest benefits to the poor occurred when local government supported:

- Access to benefits from timber harvesting and other forest products
- Health and education services
- Recognition of land rights of the poor
- Infrastructure development
- Access to jobs
- Communication among constituents and with local government.

In many places, local governments are not using the opportunity to use forest resources for poverty alleviation. Local government should support management of valuable

Box 5. Spheres for local government to improve wellbeing and reduce poverty

Natural Sphere	Economic Sphere	Social Sphere	Political Sphere
<ul style="list-style-type: none"> • Provide and enforce legal frameworks for sustainable forest resource use • Support conservation efforts • Mediate conflict between customary and legal resource access rules. 	<ul style="list-style-type: none"> • Create a stable enabling environment for economic development • Attract investors • Support small and medium-sized enterprises • Facilitate access to capital and markets. 	<ul style="list-style-type: none"> • Identify and communicate with relevant social groups • Offer mediation for conflicts and disputes among villages or between villages and enterprises • Encourage social cohesion • Promote collaboration among local interest groups. 	<ul style="list-style-type: none"> • Empower villages and vulnerable or marginalised groups through more participation • Establish genuine two-way communication with the poor • Provide and enforce legal protection and security • Increase transparency and fight corruption.

forest resources to reduce poverty. They can do this directly through local economic development policies. Even when a local government does not have direct authority over forest resources, it can act as an advocate for people living in forest areas and assist them in dealing with other government agencies. For example, government officials responsible for forest resources who may ignore a request from a poor village would be more likely to respond to a meeting convened by a local government agency. Care should be taken that economic development and forest management activities are consistent with poverty reduction aims.

Some ways in which forests can be managed for the benefit of the poor include improving their access to and control of forest resources, educating the poor on their forest rights, protecting the forest assets of the poor, creating an enabling environment for the development of forestry enterprises and conservation, better distributing forest benefits to the poor, and supporting downstream market development.

From a regulatory perspective, local government can ensure the labour safety of forestry operations, enforce property rights and affect how benefits are distributed. Government can lobby to coordinate poverty reduction regulations across sectors, especially forestry, economic development and environmental sectors. Local government can support choices of species, quantities and products to be managed that better match the needs and preferences of the poor.

It should not be assumed that forestry is always the most important sector to develop. In some cases, other more intensive forms of land use, employment or other services will be more effective ways of addressing poverty. Forest dependence can become a poverty trap where the livelihood benefits are insufficient to enable people to ever accumulate surplus or have enough economic security to choose an alternative livelihood.

Local government should not benefit only people that already enjoy a strong economic or political position. Preventing elite capture of benefits and protecting the



Photo by Christian Gönner

Local government can promote projects that strengthen the forestry sector, such as the processing of rattan.

rights of the poor is essential. Transparent actions that call attention to excessive benefits to elites or illegal practices should be encouraged. Monitoring the impacts of actions is essential to adjust and improve future efforts.

4. Achieve a balance across different aspects of wellbeing

Local government can influence many different aspects of poverty. Balance is needed among the natural, economic, social and political spheres (see 'Poverty and wellbeing have many dimensions') and core conditions that affect people's subjective wellbeing. Box 5 gives some examples of how local government can influence wellbeing across these different areas.

Development interventions often involve trade-offs where gains in one sphere are made at the cost of

losses in another. For example, forest conversion to oil palm generated significant income in Indonesia, but also degraded the forest and increased the vulnerability and food insecurity of poor households which depended on the forest.

Many local governments are quick to focus on the economic sector and give less attention to the other dimensions, because they may be more sensitive or less visible and there is less knowledge about how to deal with them. However, for achieving sustainable development, all NESP spheres are necessary and can be mutually reinforcing.

Where local governments are newly formed, building capacity in these four areas may be necessary. Although many local governments are still struggling with their new mandates, there are positive signs that decentralisation can benefit the poor and improve wellbeing. Being closer to those in need, listening to them, and regarding them as partners in development is a first step. In addition, efforts should be made to enhance the capacity and professionalism of local government, as well as to develop mechanisms for addressing wellbeing in all spheres in a sustainable way.

References and further reading

Batterbury, S. and Fernando, J. 2006 Rescaling governance and the impacts of political and environmental decentralization: an introduction. *World Development* 34(11): 1851-1863.

de Jong, W., Ruiz, S. and Becker, M. 2006 Conflicts on the way to communal forest management in northern Bolivia. *Forest Policy and Economics* 8: 447-457.

Gottwald, C. 2006 Capacities of rural forest-dependent communities in the northern Bolivian Amazon in times of legal reforms. *Freiburger Schriften zur Forst- und*

Umweltpolitik Band 11. Remagen-Oberwinter (Verlag Dr. Kessel), Freiburg, Germany.

Gregersen, H.M., Contreras-Hermosilla, A., White, A. and Phillips, L. 2005 Forest governance in federal systems: an overview of experiences and implications for decentralization. *In*: Colfer, C.J.P. and Capistrano, D. (eds.) *The politics of decentralization, forests, power and people*, Earthscan, London.

Jütting, J., Kauffmann, C., Mc Donnell, I., Osterrieder, H., Pinaud, N. and Wegner, L. 2004 Decentralisation and poverty in developing countries: exploring the impact. OECD Development Centre. Working Paper No. 236. Paris.

Ribot, J.C. and Larson, A.M. (eds.) 2005 Democratic decentralisation through a natural resource lens. Routledge, Oxon, UK. 260p.

Ruiz, S.A. 2005 Institutional change and social conflicts over forest use in the northern Bolivian Amazon. *Freiburger Schriften zur Forst- und Umweltpolitik* Band 10. Remagen-Oberwinter (Verlag Dr. Kessel), Freiburg, Germany.

Soetarto, E., Sitorus, M.T.F. and Napiri, M.Y. 2001 Decentralisation of administration, policy making and forest management in Ketapang district, West Kalimantan. *Case Studies on Decentralisation and Forests in Indonesia* Case study No. 8. CIFOR, Bogor, Indonesia. 55p.

Wollenberg, E., Moeliono, M., Limberg, G., Iwan, R., Rhee, S. and Sudana, M. 2006. Between state and society: local governance of forests in Malinau, Indonesia. *Forest Policy and Economics* 8(4): 421-433.

How do forests influence poverty?

Local governments trying to reduce poverty in forest areas face different challenges from those in agricultural or urban areas. Forests can create unique opportunities for reducing poverty or present conditions that trap people in poverty.

The link between forests and poverty varies depending on several factors, including the degree of remoteness of the forest, the resource mix found in the forest, and how local people interact with these resources. This link can be complex. For instance, in Pando, families enjoy one of the highest average *per capita* incomes in the country, because Brazil nuts harvested from natural forests provide a lucrative trade. At the same time, they face great hardship because their remote villages have precarious access to health services and education.

It is important that local governments understand the role forests play in rural livelihoods. This will allow them to attempt to reduce poverty in ways that respond to problems faced by forest communities without producing negative impacts on the resources that support their livelihoods.

What is poverty in forest communities?

Poverty is multidimensional. It is necessary to consider which facets of poverty are most relevant in the context of forest peoples. Forest-based livelihoods offer both

opportunities and limitations. These environments often have poor infrastructure and limited services, but also less pressure from overcrowding, violence and pollution that confront urban populations. Forest people's subjective wellbeing can be strongly influenced by their emotional and spiritual ties to remote forest landscapes. Such factors vary from site to site, but in this section we can touch on some of the main issues that define conditions of poverty in forested regions.

Understanding the nature of poverty and wellbeing in forests is complicated by the diversity found in forests, variation within and between forest communities, and differences in their rights and opportunities to use their resources. Many basic needs can be satisfied by forest products—for example, food, medicine, clean water, religious items, fuel and construction materials provide a level of self sufficiency. At the same time, the usual location of forest communities in remote areas means that they have poor access to basic services such as quality education and good healthcare.



Photo by Kristen Evans

Communities in Pando derive most of their income from harvesting Brazil nut from natural forests.

Forest resources can also generate income from a wide range of products, including timber, nuts, bark, fruits, bush meat and medicinal plants. This diversity allows families to avoid risk by switching between products as prices fluctuate or seasons change. However, forest communities often face significant obstacles to actually raising cash income from the forest, and people's monetary wealth tends to be low. Some forest products are spread sparsely over large stretches of forest, requiring great investments of time and effort to harvest them, and thus providing low return for the labour invested. People living in forest environments typically lack information about prices and demand, and if they try to access markets, transportation expenses consume a high percentage of derived incomes. Because of the risks and high costs of market participation, families rely heavily on middlemen to sell agricultural and forest products. These intermediaries claim a substantial share of the profits. People living near forests also have fewer opportunities for wage labour. Sometimes jobs related to logging, harvesting other forest products, ranching in cleared areas or mining are available, but these jobs are usually short term and often seasonal.

Social dimensions like cooperation, trust and low conflict—three indicators forest people often cite as influencing their sense of wellbeing—can vary widely among forests communities. They vary as result of: the strength of social networks, such as those based on kinship or market relations; the level of homogeneity in terms of ethnic, religious, socioeconomic and political factors; the strength of hierarchies and local governance institutions; the level of competition for resources within the community; and external pressures, such as those associated with frontier change. In some places, isolation or poor relations with nearby communities require greater self-reliance. In other cases, individuals may be highly dependent on others for their livelihoods and wellbeing, leading to greater social cohesion and cooperation. Trust and conflict mediation become necessities for survival. Where there is low population density, the ability

for communities to split and move to new locations when conflicts erupt can provide a safety valve to relieve tension.

Stable social networks are not easy to form. Isolation can make it difficult to build strong ties with others, when there is little opportunity to interact. Where people live in dispersed settlements, it can be costly and difficult for them to organise themselves into effective groups, further weakening the political organisation among forest communities. Where forest land or resources are valuable, conflicts within communities and with outsiders can be intense. In East Kalimantan, conflicts over valuable eaglewood had serious negative impacts on social cohesion in villages. In Pando, disputed or ill-defined property rights, exacerbated by high demand for Brazil nuts, have sometimes resulted in violence.

People in remote regions can be politically marginalised, placing them at a disadvantage compared to people in more accessible urban settings. Remoteness from political centres provides reduced opportunity to participate in meetings, lobby decision makers, or comply with administrative requirements that affect daily life. For example, in Kalimantan, people from remote villages often could not participate in important meetings because the announcements arrived after the meetings had been held. While marginalisation is a problem, in some cases, the poor may seek out remote areas to avoid political repression or discrimination.

Insecure land tenure weakens the political influence of forest communities and threatens their livelihoods. It is common for forest communities to have no legally recognised rights to the lands they have occupied for generations. They are considered landless squatters and are given no political voice. The right to collect and sell forest products greatly influences the types of forest-related incomes that are available to the poor. In many places, national laws permit local people to harvest only items that they can consume. When forest communities lack formal property rights, they may be forced to market products, like timber, clandestinely on informal markets, severely limiting

Are forests safety nets, poverty traps or escape routes?

What is the role of forests in helping people out of poverty? Debates have identified that forests play different roles. Depending on the situation, forests can be safety nets or poverty traps. Most of the discussions summarised here emphasise the link between forests and the economic sphere.

Forests serve as safety nets for the most vulnerable during times of hardship, such as droughts or agriculture price collapses. People in forest areas may temporarily use alternative forest products to meet emergency needs when primary resources in their livelihood systems fail. The safety net function could provide for subsistence consumption (for example, by adding root crops, bush meat, vegetables and medicine) or for cash income. The durability of the safety nets is limited; although the forests can provide a buffer period to lessen the impact of a calamity, people probably cannot rely on the forests for long and must find other alternatives quickly.

Conversely, dependence on forest resources could also be seen as a poverty trap under certain conditions. This can occur when the poor are forced into marginal forest areas where the only products available to them have little value, or where they lack the capacity, assets or rights to take advantage of resources, so instead opt for livelihood strategies that allow survival in the short term, but that over the long term further degrade the resource. The result is a downward spiral of accelerated resource degradation and increasing poverty.

Forest-related activities can generate opportunities, or escape routes, for the poor. Timber, for example, can provide significant cash income, although only if families can overcome limited market access, unclear tenure rights, and elite capture. This does not necessarily bode well for



Photo by Michaela Hang

their ability to negotiate fair prices and denying them legal recourse if cheated. If their property rights are insecure or contested, they may risk loss of key resources to more powerful stakeholders, particularly if markets open and values increase.

forests, because once families start to earn higher incomes, they may decide to clear forest, preferring agriculture investment to forest-based livelihoods. However, there are other strategies, like the extraction of non-timber forest products, such as Brazil nut, rattan and natural rubber, that provide relatively good income without degrading the resource base. In the future, environmental services are likely to offer attractive opportunities for communities that have maintained their natural forest landscape.

References and further reading

- Barr, C., Wollenberg, E., Limberg, G., Anau, N., Iwan, R., Sudana, I.M., Moeliono, M. and Djogo, T. 2001 The impacts of decentralisation on forests and forest-dependent communities in Malinau district, East Kalimantan. Case Studies on Decentralisation and Forests in Indonesia Case Study No. 3. CIFOR, Bogor, Indonesia. 48p.
- Meijaard, E., Sheil, D., Nasi, R., Augeri, D., Rosenbaum, B., Iskandar, D., Setyawati, T., Lammertink, A., Rachmatika, I., Wong, A. *et al.* 2005 Life after logging: reconciling wildlife conservation and production forestry in Indonesian Borneo. CIFOR and UNESCO, Bogor, Indonesia.
- Obidzinski, K. and Barr, C. 2003 The effects decentralisation on forests and forest industries in Berau district, East Kalimantan. Case Studies on Decentralisation and Forests in Indonesia Case Study No. 9. CIFOR, Bogor, Indonesia. 33p.
- Ribot, J.C., Agrawal, A. and Larson, A.M. 2006 Recentralizing while decentralizing: how national governments reappropriate forest resources. *World Development* 34(11): 1864-1886.
- Shackleton, S., Campbell, B.M., Wollenberg, E. and Edmunds, D. 2002 Devolution and community-based natural resource management: creating space for local people to participate and benefit? *Natural Resources Perspectives (ODI)* 76: 1-6. (Available at: <http://www.odi.org.uk/nrp/76.pdf>.)
- Sunderlin, W.D., Angelsen, A., Belcher, B., Burgers, P., Nasi, R., Santoso, L. and Wunder, S. 2005 Livelihoods, forests and conservation in developing countries: an overview. *In: World Development* 33(9): 1383-1402.
- USAID (United States Agency for International Development) 2006 Issues in poverty reduction and natural resource management. USAID, USA. (Available at: http://www.usaid.gov/our_work/agriculture/landmanagement/poverty/pubs/poverty_nrm_report.pdf.)
- Wollenberg, E., Belcher, B., Sheil, D., Dewi, S. and Moeliono, M. 2004 Why are forest areas relevant to reducing poverty in Indonesia? Governance Brief No. 4. CIFOR, Bogor, Indonesia. (Available at: http://www.cifor.cgiar.org/publications/pdf_files/govbrief/GovBrief0404.pdf.)

Part I has introduced a number of ideas to think about poverty and wellbeing and their relation to decentralisation in forest areas. While critically thinking about poverty is necessary, it is not enough. Development practitioners and especially decision makers at the local government need more than theoretical concepts. They want practical guidance for improving poverty reduction strategies and making their development programmes more effective.

Part II of this source book responds to this demand. Building on the concepts given in Part I, it provides four practical tools successfully tested in the field. The description of the tools is meant to inspire local governments in their efforts to reduce poverty and improve the wellbeing of their constituents.



Photo by Kristen Evans



Part II.

Monitoring and Planning Tools



Strategies supporting the decision making cycle of local governments

Local governments are closer to the poor than central governments. However, this does not mean that local governments are always successful at reducing poverty; they may have the will, but lack the resources, capacity or political mandate to be effective.

In spite of the obstacles, there is an important first step that local governments can take towards poverty reduction: they can directly involve the poor in government decision making.

Figure 4 shows a simplified example of a local government decision making cycle. This model reflects how decisions are ideally made in Bolivia and Indonesia

Figure 4 also demonstrates how the four tools in this source book can be useful in the cycle. Some tools can be used to improve participatory planning by helping communities identify and prioritise their demands; other tools assist local governments in monitoring or evaluating efforts to reduce poverty. The tools help strengthen the decision making cycle by providing new information and opportunities for action at strategic entry points in the cycle. They also provide mechanisms for improving the participation of communities.

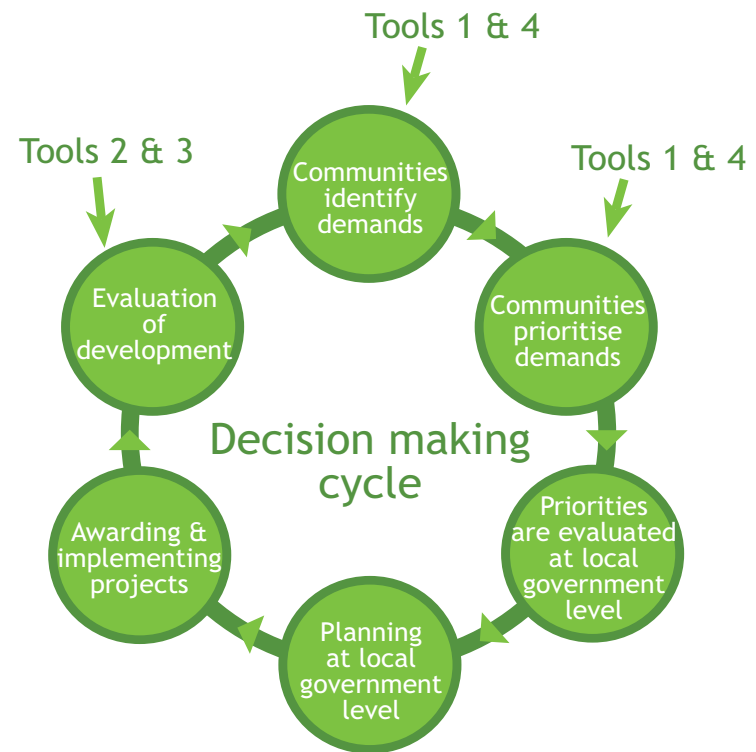


Figure 4. Decision making cycle.

Monitoring

What is monitoring?

Monitoring is the systematic gathering and analysis of information in order to gauge if something is changing. Monitoring is a key function of government and an essential part of the learning process for local governments that have been charged with new responsibilities and resources under decentralisation. With the information provided by monitoring, local governments can analyse whether their programmes are working and determine how to improve them. They can learn from both successes and failures.

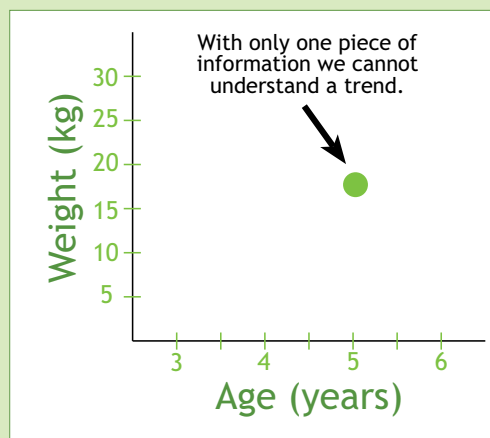
Monitoring can help local governments understand if new government processes are participatory. For instance, monitoring can answer questions such as:

- Are community leaders giving all constituents a chance to be consulted before proposing projects?
- Is community participation in annual budget meetings improving? Who is participating?

Monitoring can also help government officials understand the conditions faced by local people. By monitoring the impact of its programmes and services, local government can understand whether programmes are helping people and identify opportunities for improvement. This

Box 6. Indicators must be measured more than once

Imagine a health technician who weighs a child once without other information and without having seen the child before. It would be difficult for the health technician to determine much about the child's growth. However, if that technician had records from the same type of observations taken repeatedly at regular intervals over a series of months, it would be possible to put the single observation in context and identify a trend. Was the child steadily increasing in weight? Was her weight stable? Had it decreased? The trend would tell much about the child's growth. Without systematic observations, the technician might suspect that something was amiss but would not know for sure, or could assume everything was fine even though an important change was taking place. If the technician could also draw on information from numerous other observations collected over years, it would be possible to place the trend into deeper context, and ask important questions: Is the change unexpected, or abnormal?



information is invaluable for prioritising and planning activities. For instance, monitoring can help local governments answer questions such as:

- Is electricity available more hours per day and per household than before?
- Has transportation to communities improved? Has the average travel time to communities decreased?
- Is the incidence of malaria in the municipality increasing or decreasing? Is the malaria eradication programme having an effect?

Currently, monitoring, if it is conducted at all, is often an afterthought or is simply done to fulfil reporting requirements. As a result, monitoring is usually poorly tied to decision making processes. Local governments have many demands on their time and resources, and often do not prioritise monitoring. Sometimes they erroneously believe that monitoring is the same as auditing and regard it with misgiving.

However, monitoring is important for local government for several reasons.

1. Monitoring helps local government track what it is doing. Local government can track processes that are necessary for it to function, such as when meetings are held, who attends the meetings, or how government projects have been implemented. This is called *process monitoring*.
2. Monitoring provides a way of tracking conditions over time. Are things getting better, worse, or staying the same? This type of monitoring attempts to describe the situation on the ground by repeatedly measuring selected indicators to observe change. Is household wellbeing improving? Is the quality of drinking water getting worse? Monitoring parameters like these over time allows local governments to better understand the nature of poverty and wellbeing.
3. Comparing the above results can determine the relationship between actions and impacts. Systematically gathering information on the implementation of programmes, as well as on changes in the affected area, allows a local government to identify whether it is having an impact and evaluate whether the impact is worth the effort. For example, a local government that has been funding a pilot school breakfast programme wants to expand the programme and is seeking counterpart funding. However, it can only demonstrate that the programme has been successful if it shows that the school breakfast programme was implemented, that it reached the intended participants and that the targeted children were better fed. This linkage between action and results would indicate if there has been success or not. This is called *impact monitoring*.
4. Monitoring helps governments plan better. It provides information to answer questions that can help local government prioritise and target activities (where, who, what problems, etc.).
5. Information resulting from monitoring also helps local government document and demonstrate its actions or needs. Providing the information to constituents is crucial for justifying programmes, but also for allowing constituents to evaluate progress. This information may be required in procuring partnership funding for future development investments.

Types of monitoring

Monitoring and evaluation can be included in every step of the project cycle. Two common types of monitoring are process monitoring and impact monitoring.

Process monitoring focuses on the implementation of local government actions. Process monitoring can help answer questions such as: Has community participation in annual budget meetings increased? Has official information been distributed to all communities? Process monitoring is important because it allows governments and communities to track how programmes are implemented and to identify ways of improving them.

Impact monitoring focuses on the changes that have taken place as a result of local government action. This is usually where success and failure are measured according to initial goals and objectives. Has literacy increased as a result of better education services? Has the number of malaria cases decreased as a result of improved healthcare? One problem with impact monitoring is that it is not always possible to establish strong causal links. The lower death rates due to malaria could also have been a result of environmental changes. However, if death rates stayed the same despite the health programme, this could indicate that measures to combat the disease were not successful.

Indicators

An indicator provides relevant and measurable information about a situation or a trend. It is a clue to a more complex reality. An indicator can be expressed as a number, for instance, kilometres of paved road in the municipality or the percentage of community members who attend a meeting. An indicator can also express the quality of something based on opinions and perceptions, for example,

whether people think transportation is getting easier or more difficult, or if the schools are providing better education.

In the example of the child's weight (Box 6), the monitoring question is 'Is the child healthy?' In order to answer that question, we chose an indicator, i.e. the child's weight. Weight is not the same as health, but knowing if a child has a normal weight, or whether her weight is increasing normally will tell us a little bit about her health. For instance, a child who is losing weight may be sick, in which case the weight loss is a side-effect of illness. The child might be losing weight because of lack of nourishment; in this case the weight loss both indicates a lack of food and represents a health problem. It is also possible to pick an indicator that expresses an opinion; for instance, asking a health professional to make a judgment about the child's health. This would provide more information to complement the weight indicator.

When to monitor?

The example in Box 6 shows that data gathered only once cannot generate meaningful conclusions about change. Information must be collected consistently at intervals that make sense for the subject matter. Should the information be collected weekly? Monthly? Yearly? The frequency depends on the objective of monitoring. If the child's weight is monitored to identify health problems, then monitoring every year will not be enough. On the other hand, monitoring her weight weekly might be too burdensome. The key is finding a balance between having enough observations to be able to identify and react to important trends without making the process too costly or time consuming.

Data must be collected at meaningful times. For instance, the Bolivian census occurs during the dry season in Pando when most families live in the urban municipalities. The regional health authority uses the population information from the

census to determine how health resources are to be distributed to the municipalities. However, during the rainy season, the forest municipalities are overburdened by families that migrate to collect Brazil nuts. The municipal health posts struggle to provide services to this influx of people because their resources have been budgeted for the low population levels of the dry season. Furthermore, the rainy season is the peak time for malaria, compounding the strain on health services. In this situation, inaccurate census data distorts the distribution of health resources. Ideally, demographic data should take into account seasonal migrations to provide a more accurate picture.

Who conducts monitoring?

Different roles exist in monitoring from designing and implementing the monitoring plan to analysing and disseminating the results. Who fills these roles depends on the objective of the monitoring programme, accessibility of data, location of data, and budget. Monitoring does not have to be an activity exclusive to the local government; in fact, constituents and interest groups should be encouraged to participate in monitoring too. If citizens have influence and involvement in monitoring, they will have ownership and express more interest in the results. By including more people in the monitoring process, a local government enhances its credibility through increased transparency.

Linking monitoring to planning

Monitoring is important for local governments because it improves the planning process. If done properly, poverty monitoring provides reliable information on the poverty trends

in a district or municipality. This information allows decision makers to answer the following questions:

- Who are the poor?
- How poor are they?
- Where do they live?
- Why are they poor?
- What can be done?
- How are these facts changing over time?

Equipped with this information, a local government can identify strategic priorities in its fight against poverty. These priorities can then be communicated to other government levels and to communities. Community leaders will know what the priorities and the available budgets are before they start their own planning processes. Their planning becomes more realistic and targeted.

The tools introduced in the following sections are examples of how monitoring can provide important information when planning programmes to reduce poverty.

Participatory planning

What is participatory planning?

Planning is the systematic process of preparing for the future by setting goals, selecting strategies, choosing activities, making schedules or budgeting resources for a period of time. When different people with distinct needs, perceptions, powers and responsibilities are involved in planning it is called participatory planning. Participatory planning generally involves the following steps, although not necessarily in this order: local government presents a proposal, collects feedback and input from constituents, and seeks to build an agreement among different interest groups. Land use planning and annual government budgets are examples of plans that can require review or input from citizens before they are approved.

Why is participatory planning useful?

Participatory planning is important for a number of reasons, including the following.

- It can enhance the quality of local governance by creating processes that are more democratic and equitable. The poor often have little, if any, voice

Box 7. On the ground in Bolivia: Participatory planning in Pando

Monitoring programmes are excellent mechanisms to invite citizens to participate in local government planning and decision making. In Pando, citizen groups participated in an interactive mapping project to create poverty maps. By pooling their knowledge, the groups were able to develop useful graphical representations of important factors affecting the wellbeing of communities, such as malaria outbreaks, transportation challenges and Brazil nut productivity. The activity was successful not only because it quickly aggregated valuable information, but also because it generated interest among citizens to participate in local government decision making. Including citizens also provides oversight and increases the accountability of a monitoring system.



Photo by Kristen Evans

in government decisions. Consultation and dialogue between local government and interest groups representing the poor can give the latter more voice and influence over decisions.

- Participatory planning encourages the poor to be more responsible for, involved in and aware of their role in local governance. It can help reduce potential conflict and build local people's feeling of ownership in the government's plan.
- Participatory planning can result in programmes that are better and more efficient. By consulting the poor and giving voice to their concerns and needs, the resulting actions are more likely to be relevant and appropriate to the conditions they face. For instance, simply consulting people about their daily schedules can help government provide services at times when people are likely to make best use of them.
- Participatory planning can increase the transparency of governmental decision making. This allows citizens to understand how and why the local government is making certain decisions. It is also a way of holding government members accountable for what they planned to do. It can improve mutual understanding and trust between the poor and local government.

Despite these advantages, participatory planning can be demanding and time consuming. Planning governmental programmes can be complex and difficult; the process becomes more challenging when multiple actors are included. Participatory planning often involves additional meetings to explain the process, debate proposals and reach decisions. This can be problematic in areas where there is little understanding of the mandate that local governments hold, or if there are unrealistic expectations of what government can or should do.

Often facilitation, or even mediation, may be necessary to reach decisions on programmes and their trade-offs. Some groups or individuals may find it more beneficial to slow down the process rather than allow decisions to be made that are not in their favour. The process can also be manipulated by governments to persuade constituents to accept predefined plans.

When and where is participatory planning done?

Participatory planning usually involves public consultations and meetings outside of the capital, often in locations that are more accessible to poor people, such as rural communities. Participatory planning can involve other activities, such as making field visits to a forest or remote community, or polling citizens to elicit their views.

Box 8. On the ground in Indonesia: Planning pitfalls

In Indonesia, communities have the right to propose development projects to the local government. These proposals are collected at the subdistrict level and then submitted to the district, often with substantial changes, however. Typically, communities never learn what happens to their proposals, while many projects are implemented without consulting the communities beforehand. This lack of communication and participation has led to the habit of submitting long wishlists without prioritisation, as communities are afraid to be too modest. The result is that the district's technical agencies ignore the communities and do their own planning, which does not necessarily respond to local demand.

When these activities take place depends on the time frame of the planning cycle. Government commonly operates on an annual planning cycle, which entails scheduling activities during the year to assure that plans are submitted on time. Multiyear (e.g. 3-year, 5-year, 10-year) plans are prepared less frequently. Participatory planning can also be used for specific projects in the short term.

When scheduling events, officials should take into consideration activities such as agricultural tasks or religious festivities. Conflicting schedules could limit the ability of some individuals or groups to participate.

Who should participate?

Often those involved in participatory planning processes are specified by law. For example, in Bolivia, municipal governments are required to consult all of the legally registered communities in their jurisdiction. There is some flexibility for municipalities to determine how the consultation takes place and what types of participation should occur.

A local government concerned about responding to the needs of the poor should take steps to ensure that the views of different interest groups from among the poor are included in the consultations. Even where a local government is not required to address the interests of all groups present, it is better to actively seek out the diverse opinions and perceptions present to avoid conflict and ensure support.

When determining who should participate, local government should begin by identifying all the possible interest groups in its jurisdiction. Groups may be defined in different ways, such as by their level of wellbeing or whether they have a particular stake in the decision (e.g. involving parents in decisions related to schools). Other groups may be defined by their identity as men, women, youth, elders, members of a certain community or ethnic group and the like. Still others may be defined by

their livelihood or as users of certain forest resources. People in an interest group should have the opportunity to confirm whether they belong to that group, or to join a different one.

For each proposal, the way in which groups are defined may be different. The opinions of certain groups may be given more weight than others because they could suffer the consequences of the proposed actions or reap the benefits of certain outcomes.

It is best to tailor specific strategies to promote participation by each of the groups. Some groups, especially the very poor, may have difficulty travelling to distant meetings. In many cases, representatives need to be invited. However, this may require measures to ensure that they are fairly selected, that they solicit input from other group members and that they report back to ensure accountability. Once a strategy is developed to maximise participation, monitoring of whether or not the plan resulted in the intended levels of participation can indicate whether the strategy needs to be adjusted.

Tool 1: Monitoring local poverty contexts through interactive mapping

What is interactive mapping?

Interactive mapping is a participatory tool for organising poverty information and local knowledge visually on maps. Any information can be included on the maps, such as the incidence of disease, quality of roads, location of health services, or household income, depending on what issues are locally relevant. Charts of data are often difficult to understand. However, when the same information is presented on a map, it becomes more useful and understandable to a wider range of people.

The method builds local capacity to produce simple reference maps that can be modified to represent different types of data and updated as new information becomes available. The maps can be generated by hand or, when the skills and equipment are present, on computers. This can involve training local technicians and community members to synthesise information, plot the relevant information on maps (manually

Box 9. Why is it interactive?

The method consists of a continuous process of revision and evaluation of local maps:

- Local groups and government officials meet to share information, either existing data or experiential knowledge.
- They transform the information into a map format.
- They evaluate the maps publicly. This validates the maps. It also improves the credibility and quality of the maps.
- The maps are continuously updated with new information and evaluated.



Photo by Kristen Evans

or digitally), and organise meetings to present and discuss the maps. These people will also need to gather additional information to supplement the material from secondary sources.

The need for an accurate map that reflects actual local conditions seems obvious; however, it is surprising how frequently local governments lack such basic decision support tools. Often, existing information is not fully analysed or adequately used. Even if used, the products are poorly distributed (i.e. not widely) or put in formats that are not useful for local decision makers or participatory processes. For example, in Pando, several governmental and non-governmental institutions regularly collect information on rural conditions, but this information is transferred directly to departmental or national agencies rather than being compiled for use by municipal governments. Local governments usually have very modest resources and limited experience in collecting data; collecting new information can be too costly or difficult. Interactive mapping provides a way of transforming existing information into a more useful format.

Why is interactive mapping useful?

Interactive mapping helps local governments and communities to:

- manage existing information and improve coordination among agencies
- track changes in poverty within their jurisdiction in order to adapt planning by prioritising and targeting interventions
- improve transparency and dialogue between local governments and their constituencies.

Interactive mapping shows where people live, the types of resources they have, the challenges they face and whether governmental programmes or services are provided nearby.

Representing local information this way makes it more accessible to people who are unlikely to read reports or tables and provides a way to present and discuss the information publicly. If done at regular intervals, interactive mapping is useful for tracking changes.

Interactive mapping step-by-step

The tool consists of five basic steps (see Figure 5). First, identify and train a core team of mapmakers and select an appropriate mapping technology. Second, prepare a geo-political base map, for example with the locations of all the communities, roads and rivers. Third, organise teams of local experts to review and organise the information to be added to create theme maps. Fourth, organise the

information into the maps. Finally, present the base map and theme maps publicly for comment and evaluation.

Steps 3, 4 and 5 are repeated as more information becomes available to build more accurate maps. Ideally, the process occurs annually to feed into local governments' budget and planning cycles.

Step 1. Organise local mapmaker team and choose mapping technology

Select a small group (6-8) of volunteers who are interested in learning new technologies and mapping techniques. The trainees should be from local government, local institutions and communities. Trainees should know how to read and write and make basic mathematical calculations. Training local people to be mapmakers not only makes the process participatory but also makes it more efficient.

Select an appropriate mapping technology. There are many ways to make maps with various levels of technology, depending on what tools are feasible. Using a handheld GPS (Global Positioning System) for geo-referencing locations is



Figure 5. Iterative cycle of interactive mapping.

Box 10. Time and materials needed for the base map

Variable depending on existing information and level of local capacity.

- Time to gather cartographic information (5 hours) (assuming base map not available)
- GPS training (1 day): use of GPS and basic cartographic methods
- Map workshop (1 day)
- Computer, GPS, notepads, grid paper, flip charts.

Team and participants

- 1 facilitator
- 1 note taker
- 3 to 10 participants (government technicians or other experts), they will develop the base map and some will continue later to help facilitate focus groups.

highly recommended, because the GPS is easy to use and the coordinate data can be applied in the mapping process with or without a computer. Geo-referenced coordinates form the basis of information that is later added to the map. Using a GPS together with mapping software, such as ArcView, is a good match if a computer is readily available. However, if access to a computer is not possible, then it is effective to draw a coordinate grid on a large piece of paper (or tape smaller sheets together) and mark the GPS coordinates on the grid. Keep in mind that it must be possible to make copies of the maps.

Organise several practices in a community and the surrounding forest. A training chain is an effective method, where the first

person learns how to take GPS points, and then has to train the next person. This method teaches people how to train others.

Step 2. Prepare base map

The base map is a geo-political map that shows boundaries, communities, rivers, lakes, roads and bridges. The base map serves as the starting point for creating theme maps that display information about poverty, wellbeing, projects, relationships or other local conditions.

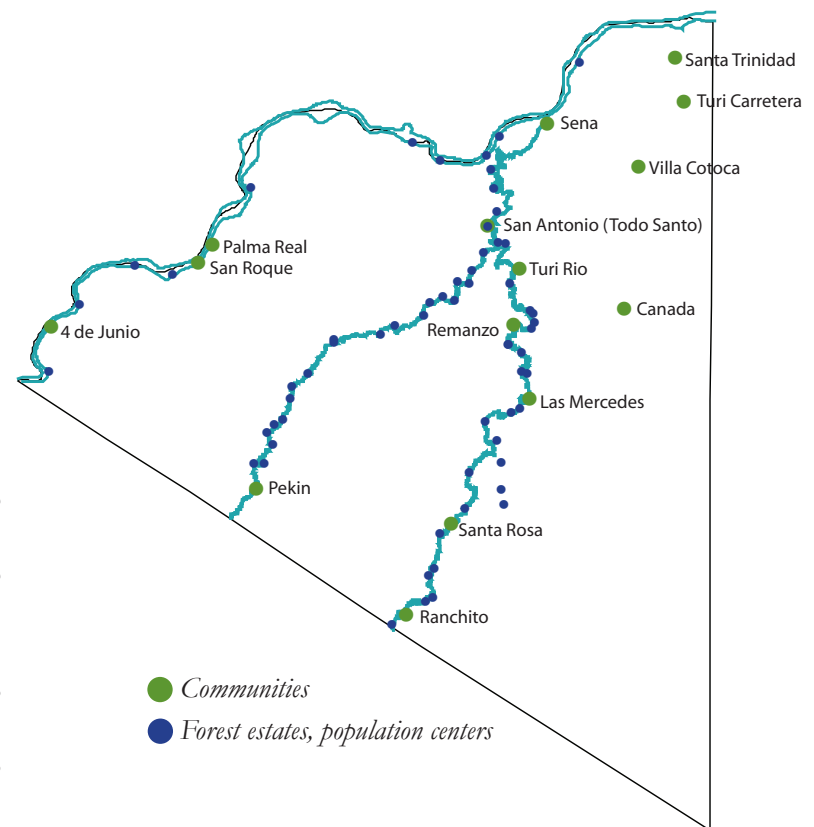


Figure 6. Base map of the municipality of El Sena in Bolivia with rivers, roads, communities, private properties and forest estates.

The local government may already have a good base map. If not, check with various government agencies and organisations (see Box 11). Look for additional sources of information, such as geo-referenced information databases and satellite images.

Combine the information into a single map. Make sure that there is sufficient detail. If the locations of important features are missing, make field visits with a GPS to collect that data.

Share the base map with local constituents (i.e. community members, landholders, merchants and local officials) for their review before moving on to the next step. Correct for errors or missing information. Make multiple copies of the base map for the next step.

Step 3. Form theme groups and collect poverty information

Identify theme maps that would be useful for decision making and planning for poverty reduction. For

instance, a map of the incidence of malaria would be helpful for a disease eradication campaign (see Figure 7).

For each theme map, form focus groups of local experts who are familiar with the topic and can contribute information or their in-depth local knowledge on the subject matter. Here are some examples of themes and possible group composition:

- *Economic sector.* Participants could include local merchants, forest estate owners, and farmers. They may use official production statistics or producer information from local associations or federations. This focus group would also draw on individuals' expertise to identify key collection or production centres or sites with important natural resources.
- *Public health.* Participants could include local health practitioners, government officials familiar with public budgets, and even such professionals as river pilots who often transport the sick in areas without regular transportation services. This group could review



Box 11. Developing the base map in Bolivia

In Bolivia, accurate municipal maps were not available. However, the necessary cartographic information could be combined from different sources to produce a single base map. Information was drawn from various organisations:

- Military Geography Institute
- National Land Reform Institute
- National Forestry Superintendency
- Municipal Border Commission.

Because the Bolivian participants had good computer skills, the team combined the information with their own analysis to generate an electronic version of the base map.

official statistics to identify information that is most relevant to local problems; for example, the incidence of diseases such as malaria and dengue fever.

- *Public works and services.* Participants could include local government specialists, health and education professionals, contractors and community representatives. This group could catalogue the location and quality of public infrastructure, services and programmes. They would draw information from public records and also from personal experiences in their respective fields.

Each group examines existing information gathered from regional institutions (e.g. the education and health services, the national statistics bureau). They also contribute their own knowledge and experience.

Step 4. Create theme maps

Provide copies of the base map to each group. Ask the groups to think about different ways of representing theme information on the map. For instance, Figure 7 shows the incidence of malaria in a municipality in Pando. The red circles show not only where malaria is endemic, but the size of the red circles symbolises how many cases occur in each community. Figure 8 is another example of a useful visual representation of data—the lines show how long it takes to reach the municipal capital.

Instruct the groups to sketch the theme information onto the base map. They should document the information and record how the map was developed. Once groups are in agreement that the information is accurately depicted, they should prepare a final version (either digital or plotted by hand, depending on the technology being used).

Once the base map and theme maps are finished, present them publicly for evaluation and comment. Have representatives from each focus group describe what is represented in their theme map and explain principal

Box 12. Time and materials needed for theme maps

- *Form focus groups – 1 day*
Identify and invite participants. Explain tasks.
- *Research – Variable for each participant*
Organise secondary information to contribute to the mapping process.
- *Meeting – 1 to 2 days*
Present and discuss secondary data, organise and sketch on base map, review draft theme map, finalise.
- *Materials*
Basic mapping tools such as a GPS, grid and compass. More advanced computer mapping programs can be used if the participants are trained.

Team and participants

- 1 facilitator
- 1 note taker
- Map technician from local government
- 3 to 10 participants per focus group

conclusions that they drew from the process of map making. The public should be asked to reflect on whether the maps are accurate and whether they are helpful.

This activity has several purposes:

- validating the information included in the maps

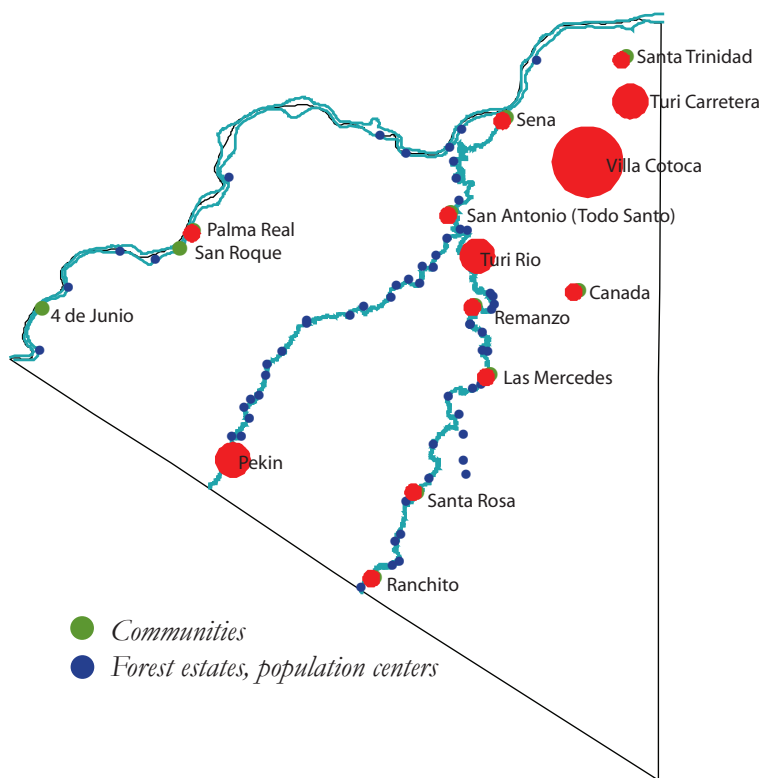


Figure 7. Incidence of malaria in the communities of El Sena, Bolivia. The size of the red circles corresponds to the annual number of cases per community.

- disseminating information about local conditions, programmes and services
- identifying whether other themes are needed or more accurate information is required.

Keep in mind that the objective is not to generate a one-time snapshot of reality; interactive mapping is a dynamic tool for understanding and evaluating local

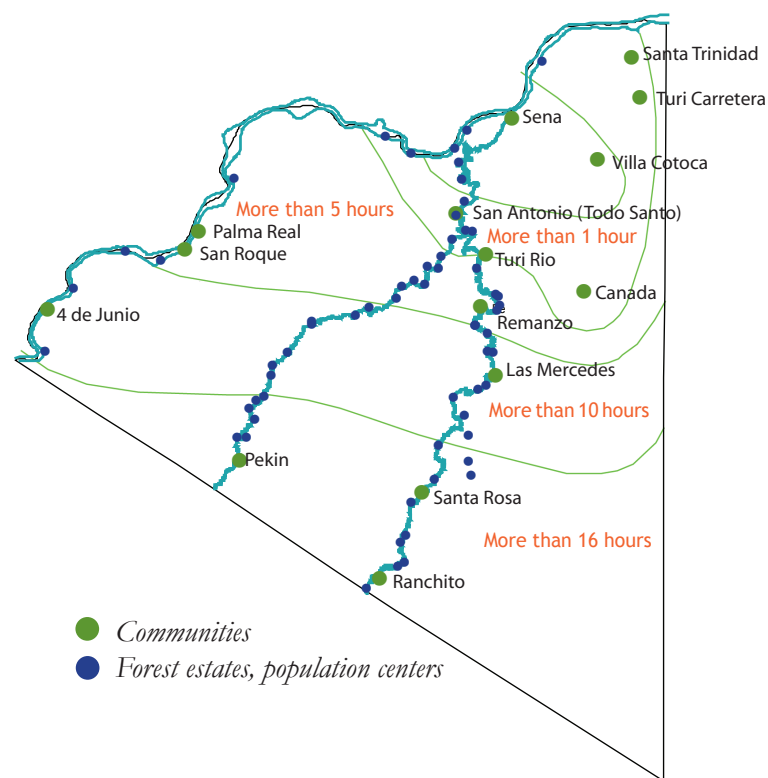


Figure 8. Travel time to communities in hours from the municipal capital, El Sena, Bolivia.

conditions over time. Therefore, Steps 3, 4 and 5 should be repeated at regular intervals, such as once per year.

An additional benefit of interactive mapping is that it encourages coordination in the collection of information by different agencies.

Box 13. Time and materials

- *Set up – 2 hours*
Review presentations with focus group representatives.
- *Public meeting – 4 hours* (depending on the number of theme maps).
- *Materials*
Complete set of maps (base and theme), flip charts, markers, review sheets.

Team and participants

- 1 facilitator
- 1 representative from each theme focus group
- Members of the public (5–12 per focus group).

Use interactive mapping for monitoring

- Analyse the theme maps for problems. Are there areas that need extra services or special programmes?
- Make comparisons between current theme maps and previous maps. Is the situation improving or getting worse? Are there certain trends that might mean that there could be problems in the future?
- Document public reaction and comment to what they see on the maps. What do the participants say about local government's performance? Based on their comments, how can local government improve?

Box 14. Tips for getting started

- Interactive mapping is interesting and fun, which makes it easy to get local people involved from the very beginning.
- Organise informal meetings with local government and institutions to present the concept. Share the examples in this book. Discuss the importance of monitoring and how interactive mapping can play a part.
- Organise a mapping training workshop. Teach basic mapping skills and how to use a GPS. Invite local government officials and local community members. Include young people, too, who often like to learn new technologies.
- From this group, ask for volunteers to be members of the mapping team. Select the most interested and dependable people.

More resources:

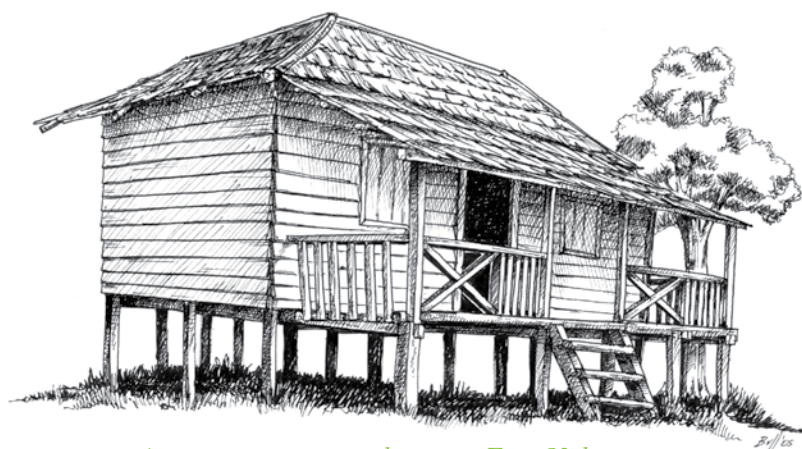
Eghenter, C. 2000 Mapping people's forests: the role of mapping in planning community-based management of conservation areas in Indonesia. Biodiversity Support Program, Washington, DC.

Jackson, B., Nurse, M.C. and Singh, H.B. 1994 Participatory mapping for community forestry. London: ODI.

Open Forum on Participatory Geographic Information Systems and Technologies. Website: <http://ppgis.iapad.org>.

Peluso, N.L. 1995 Whose woods are these? Counter-mapping forest territories in Kalimantan, Indonesia. *Antipode* 29(4): 383–406.

Tool 2: Monitoring household wellbeing through surveys based on local indicators



Average community home in East Kalimantan

What is a local wellbeing monitoring system?

A local wellbeing monitoring system is a programme that regularly checks and analyses the poverty and wellbeing condition of households or communities. The monitoring system is called 'local' because it is based on local concepts of poverty and wellbeing and uses locally meaningful indicators.

Why is a local wellbeing monitoring system useful?

Poverty and wellbeing are often measured at a national or international level. But local wellbeing monitoring systems have a number of advantages, such as:

- Local wellbeing indicators are less abstract;
- Local wellbeing monitoring systems provide more detailed data relevant to the local culture and geography;

Box 15. Unsuitable national indicators

In Indonesia, national poverty standards qualify only houses with dirt floors as poor. However, in East Kalimantan, even the houses of the poorest have wooden floors. Hence, national poverty indicators do not necessarily make sense locally. This is a strong argument for making more use of local wellbeing and poverty concepts.

- Local wellbeing monitoring systems can be better linked to local development issues;
- Local governments develop a stronger sense of ownership for their monitoring system.

However, integrating local wellbeing monitoring systems into a national programme might be a challenge. Decision makers at the national level could perceive local approaches as competing with other nationwide monitoring programmes. However, local and national monitoring systems are complementary as they serve different purposes. For the reasons listed above, a local wellbeing monitoring system best suits the needs and demands of the local government, while a national system allows better comparison of poverty and wellbeing across the different regions of a country.

Wellbeing monitoring step-by-step

The tool consists of a step-by-step description of how to develop a practical survey instrument to monitor household wellbeing. The description includes logistic design, development of locally meaningful wellbeing indicators, and practical tips for implementing the tool.

The process is described in six main steps as indicated in Figure 9. Steps 4, 5 and 6 should be repeated regularly, for example every year or two.

The tool may be implemented by a single government agency, an NGO or a monitoring team (see Box 17).

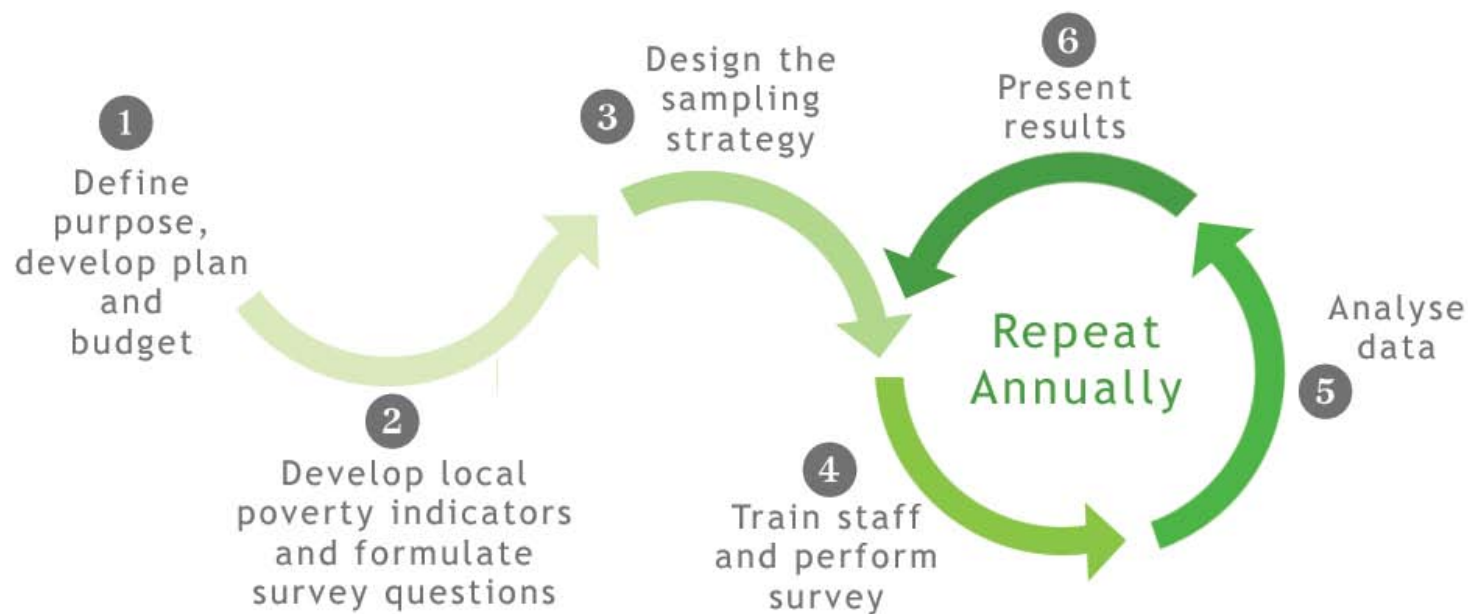


Figure 9. Steps in local wellbeing monitoring.

Step 1. Define purpose, develop plan and budget

Designing a monitoring programme requires careful planning. This step provides guidelines for the development of a local wellbeing monitoring system.

A. Define the purpose of the monitoring

Organise a meeting with local government decision makers. Even if the monitoring will be carried out by a single agency, it is important that other agencies are involved in this step. Their assistance throughout the process may be needed, and they may also be end users of the results.

Discuss the purpose of wellbeing monitoring:

- Why does the local government want to monitor wellbeing?
- What elements of wellbeing does it want to monitor?
- Is the purpose to define the percentage of poor people in a district or municipality, or is it to identify each and every poor household?

Box 16. Defining the purpose of wellbeing monitoring in Malinau

Officials from several local agencies were invited to a workshop to define the need for poverty monitoring in Malinau, Indonesia. In a brainstorming session, the participants articulated individual perceptions. These ideas became the basis for a common purpose for poverty monitoring:

‘To monitor the poverty level to assess the impact of government programmes and to provide input to district government for programme development.’

- Is the purpose to find the extent to which households are able to fulfil their basic needs, or is it also to identify the conditions that influence how poor households can lift themselves out of poverty?
- Does the local government need to better target assistance programmes for the poor, or does it want to improve the development planning of the administrative area?

It is worthwhile first to examine existing monitoring systems: what are their purpose, target group, indicators, frequency and type of data? This assessment will reveal whether additional data collection is needed and helps to avoid developing redundant programmes. It can also determine how existing monitoring systems could be improved, either through better coordination among government agencies, or through interactive mapping as in Tool 1.

B. Define the level of detail of monitoring

Planning should include discussing the level of detail needed. Is poverty data needed on individuals, families or households, or is it enough to identify only poor communities? This decision has strong implications on how data will be collected, how much information is needed, and on the resources required. The more detail needed, the greater the demand on local staff and budget.

It is important to be realistic; a simple but persistent monitoring programme is better than a highly sophisticated version that is only seldom repeated or not used at all. Limited resources might decide whether the monitoring is repeated annually, biennially or at even longer intervals.

C. Identify the implementing agency

Find out which agencies will be involved in the monitoring. If the purpose is to improve the planning related to poverty reduction, it makes sense to link poverty monitoring to the district or municipal planning agency.

If the purpose is to identify poor families, the statistical service might be the appropriate executing agency.

Involving different agencies has the advantage of bringing in more expertise and different viewpoints. However, the trade-off is that coordination and cooperation can be more difficult. This also is the case when NGOs are involved.

A practical solution can be to establish a monitoring team comprising 4-8 representatives of the most relevant government agencies. This will combine existing expertise and facilitate communication across government sectors. In addition, external experts from NGOs, statistics agencies or academic institutions should be invited as needed. The monitoring team's main function is to design and plan the

monitoring system, to ensure its proper implementation and to present the findings to the local government.

D. Plan the budget

Plan a budget based on the monitoring programme design. The source of funding for the survey can affect the strategy. If the survey is conducted using local government funds, verify the schedule for disbursement of the money. Any administrative delays could affect the implementation. Unexpected delay could push back data collection to inconvenient times when community residents are occupied with other activities, like agricultural chores or forest product collecting, which increases the difficulty in contacting all respondents.

Step 2. Develop local poverty indicators and formulate survey questions

This section describes how to develop locally specific indicators for measuring poverty and wellbeing. These indicators are then used to formulate the survey questions.

The approach described here uses the Nested Spheres of Poverty (NESP) model that was introduced in Part I. A review of that section might be helpful before continuing.

A. Define poverty and wellbeing locally

Organise several focus group discussions (see Tool 3) to create local definitions of poverty and wellbeing. Focus groups can include members of a single community, or members of subgroups within a community, like men, women, youth or ethnic groups; the decision on focus group composition depends on the locally relevant criteria related to livelihoods and wellbeing. Focus groups could consist of only local government representatives, or these could be grouped together with development agencies and NGOs active in the region. The understanding of poverty tends to be different between groups, such as women and men (Box 18). Similarly, government officials often have different views on poverty to community members.

Box 17. The monitoring team of Kutai Barat

The monitoring team of Kutai Barat was officially established by the district government and consisted of five government employees representing the community empowerment service, the demographic census unit, the environmental service, the regional planning agency, and the agricultural service, plus one representative of a local NGO. The team received technical training and assistance from CIFOR and external trainers (on the use of statistics and geographic information systems) over more than 3 years. The team was highly motivated, and organised the various monitoring trials and the official monitoring survey in a professional way.

Due to the typical staff fluctuation, some members were exchanged over time as some moved on to more influential planning positions. However, after a new district leader was elected, the monitoring team's work came to a temporary halt.

Box 18. Perspectives on poverty can be different between men and women

Figure 10 shows the results of the focus group discussion in 20 villages in Kutai Barat. In each, the participants were divided into two groups: women and men. Each group came up with different sets of factors considered to be important for achieving wellbeing. While education, jobs and income, health and prevention of disaster were given almost the same high priority by both groups, women also mentioned clean water and access to capital, whereas men emphasised transport and government aid.

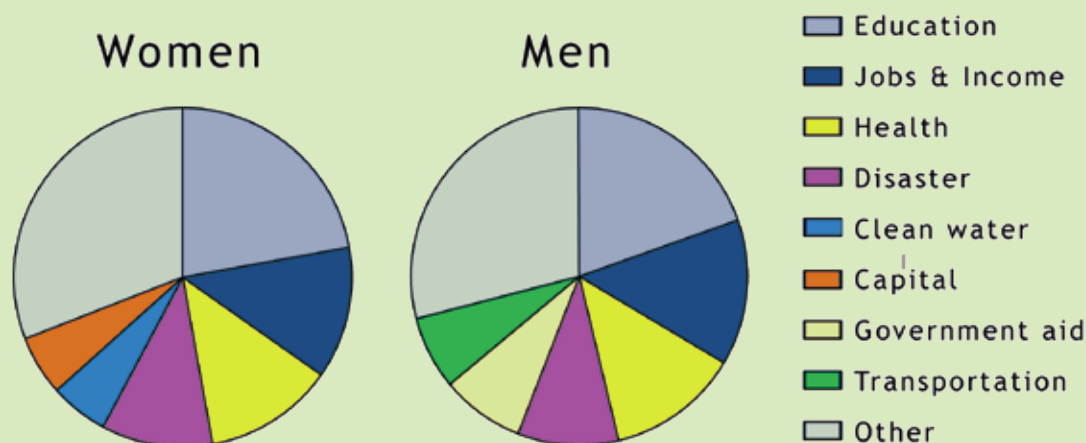


Figure 10. Wellbeing priorities of women and men in 20 communities, Kutai Barat, Indonesia.

During the focus group sessions, instruct the participants to identify the most important aspects of both poor and well-off households. If focus groups are not feasible, interview several key informants who are representative of the community.

Once the monitoring team has a full list of aspects of poverty and wellbeing, it should organise them using the following spheres of the NESP model:

- Subjective wellbeing
- Core spheres: health, wealth and knowledge

- Context spheres: natural, economic, social and political spheres, and infrastructure and services.

If a sphere is not well represented, the facilitators may ask some probing questions to determine whether some aspects were overlooked, or if informants really did not find the sphere very relevant for explaining wellbeing. However, care must be taken to avoid influencing or guiding the informants.

B. Prepare a list of possible indicators

Using the gathered information, the monitoring team should prepare a long list of possible indicators. As some indicators

might be generally applicable, it is also worthwhile checking lists with poverty indicators from other sources, such as:

- National and regional wellbeing and poverty models
- International poverty models
- Development theories
- Sustainable development principles
- Ideas from the local monitoring team.

If some indicators are already measured through existing monitoring programmes, avoid duplication of work and make best use of this data by coordinating with these programmes!

Box 19. SMART criteria for poverty indicators

S	Simple
M	Measurable
A	Adapted
R	Robust
T	Timely

Next, check the indicators to verify whether they comply with the SMART criteria (Box 19).

- *Simple* means that an indicator is easy to understand and is practical.
- *Measurable* means that the indicator can be reasonably quantified and assessed by locally available means (e.g. no expensive scientific methodology is needed).
- *Adapted* means that the indicator is location specific, i.e. it should be relevant in its sociocultural and natural-geographic context.
- *Robust* means that the indicator value ideally does not depend on who the assessor is or when the assessment is conducted (unless seasonality is a factor that needs to be captured). Robustness makes an indicator credible and acceptable to policy makers.
- *Timely* means that the indicator measures change in a reasonable period of time. For instance, if the planning horizon is one year, but the indicator only changes after 5 years, it is not timely.

Be aware that poverty indicators only work as long as they can be linked to an underlying poverty cause or condition. When that causal link changes, the indicator may no longer be relevant and may have to be replaced. For instance, if access to schooling ceases to be a constraint for any family, then a different indicator is needed to measure education. As a rule of thumb, poverty indicators should be reviewed at least every 5 years. However, consider changes to indicators with care—changing the indicators can make it difficult to compare over time and monitor change. Note changes to monitoring methods immediately, as people are likely to forget as time passes.

The long list of indicators tested in our project can be found online at the project website (<http://www.cifor.cgiar.org/povertyindicators>).

Box 20. How to turn indicators into questions—An example from Malinau

The monitoring team in Malinau agreed upon the following indicators for wealth:

1. Material assets (motorbike or outboard engine, chainsaw or refrigerator)
2. Condition of housing (general condition, electricity, toilet)
3. Annual purchase of new clothes

These indicators were then translated into questions for the poverty survey, as follows.

1. Material assets

Does this household own:

an outboard engine or motorbike? 1 no, 3 yes
a chainsaw or refrigerator? 1 no, 3 yes

2. Condition of house

Is the house (surveyor directly observes, does not need to ask):

- 1 Below local standard,
- 2 Local standard
- 3 Above local standard

Is there electricity in the house?

- 1 no,
- 2 yes, but not functioning,
- 3 yes and functioning

Does the house include an indoor toilet?

- 1 no, 3 yes

3. New clothes

During the last year did any household member buy new clothes?

- 1 no, 2 yes, 1–2 times, 3 yes, > 2 times

C. Quantify indicators and formulate questions

Discuss how the indicators can be weighted or quantified. Quantifying makes it possible to compare poverty data within or across communities. For quantifying an indicator, turn it into a monitoring question and find two or three answers that cover the range from ‘good’ (3 points) through ‘intermediate’ (2 points) to ‘critical’ (1 point). The questions and answers should be simple, clear and unambiguous. Local language should be used where people have problems in understanding the national language.

Note that each question should be a closed question (see Box 20). A closed question has a limited number of answers, and the respondent must pick one. The use of closed questions is best because the comparison of answers is easier.

Preparing good questionnaires is an art that requires a lot of experience. Some questions might be sensitive or generate biased answers. For instance, people may avoid answering a question about their annual income, or may be unable to do so accurately, but would have less of a problem with specific questions about recent expenditure figures and living costs. In order to avoid such biases, local governments should seek external assistance from experienced social scientists, the government statistical service, universities or NGOs.

D. Shorten the list of indicators

Having more indicators allows for a wider range of information. However, too many indicators mean long, exhausting interviews and more complicated analyses.

Three indicators per wellbeing sphere is ideal. With nine spheres, the total number of indicators would be 27. This would mean 27 questions, which can reasonably be asked in an interview of approximately 30 minutes.

Use a field test for shortening the original long list, prepared under step 2B. Choose 5-10 communities of various sizes, ethnic composition and location. Prepare a questionnaire with all the indicators and test them in the communities, using standard survey techniques.

Next, group the results by wellbeing sphere. For instance, combine data from all questions related to health, data related to all questions on knowledge and so on. Add up all the combined scores by sphere (health is one sphere, knowledge another sphere, see Part I) into one figure, until there are nine figures that correspond to the nine spheres of the NESP model.

Next, prepare subtotals by adding up data of different combinations of three questions related to a single sphere as you finally need only three indicators per sphere. Test the subtotals of the different combinations of questions in a correlation test (e.g. Spearman's rank correlation test) against the total value for all households.

Choose those subtotals that show the highest correlation with the full set of each sphere (ideally the correlations coefficient, r , should be greater than 0.8). High correlation shows that the subsets represent the full set, because some indicators are correlated with others. For instance, a household that has a satellite antenna almost certainly also has a TV and access to electricity. Thus, 'having a satellite antenna' might be an indicator that actually represents all three test indicators.

Remember that statistical tests are not all that is needed for understanding. Use intuitive judgment when analysing the smaller set of indicators. Statistics are useful, but they cannot replace thinking! (See Box 21.)

Step 3. Design the sampling strategy

The sampling strategy depends on both the goals of the monitoring and the resources available. A detailed sampling at the household level provides the most accurate data and the most information, but requires sufficient funds, time and qualified staff. If a less detailed picture is sufficient, the local government might decide to examine poverty at the community level instead of at the household level.

A. Define the sampling unit

Decide if the sampling unit will be the household or the community. If selecting the household, perform household surveys with standardised questionnaires.

If the sampling unit is at the community level, use focus group discussions. Keep in mind that the two techniques require different skills and experience. If using focus groups, consider requesting assistance from NGOs with trained facilitators. (An example for using focus group discussions is given in Tool 3.)

B. Select villages

Try to include all communities in the poverty monitoring programme to avoid the risk of producing a skewed picture. If this is not possible, select communities that adequately represent the variety of the total population.

When selecting the communities, consider whether ethnicity, community size, accessibility, dependence on forest resources or other factors could influence wellbeing and poverty in the sample. This method, called purposive sampling, can be effective if it coincides with the objective of the survey. However, the patterns that emerge from sampling are less exact and never provide the same quality of data as a survey that includes all communities. For instance, if a health problem is detected in one community, the method would lead to the conclusion that all communities in the same group have a similar problem, which might not be the case.

Box 21. Reducing the number of health indicators

In Kutai Barat, we used 11 test indicators from our long list for health and nutrition: (1) consumption of animal protein, (2) shortage of animal protein, (3) consumption of rice, (4) shortage of rice, (5) availability of clean drinking water, (6) ill family members, (7) chronic diseases, (8) children below a critical body length–weight index, (9) available treatment, (10) infant mortality, (11) maternal mortality.

We assessed these indicators in a trial covering eight communities. We then tested the correlation of all subsets of the 11 indicators with the full set. We also combined some of the test indicators into a new one, e.g. ‘shortage of animal protein’ and ‘shortage of rice’ were combined into ‘food shortage’ (over a period of at least one month). The combination with the highest correlation was: ‘protein consumption’, ‘food shortage’ and ‘serious disease’ with a correlation coefficient $r = 0.889$.

However, in the final monitoring system, we modified the set once again because the monitoring team believed that ‘availability of clean drinking water’ was too important to be left out (although correlation was a bit lower, $r = 0.858$).

To the right is the short list that was finally used in the wellbeing monitoring survey 2006 of Kutai Barat.

Short list of poverty indicators used in Kutai Barat, 2006

	Wellbeing sphere	Wellbeing indicator†
S W B	Subjective wellbeing	Feeling happy Feeling prosperous Feeling poor
	<i>Health</i>	Food shortage over 1 month Access to clean drinking water Access to health facilities and services
	<i>Material wealth</i>	Appropriate housing conditions Minimum material goods: motor bike/boat Minimum material goods: satellite antenna/fridge
C O R E	<i>Knowledge</i>	Highest level of formal education in household School attendance Informal knowledge/skills
	<i>Natural sphere</i>	General disturbance of nature Occurrence of hornbills or storks Overexploitation of natural resources General water quality
	<i>Economic sphere</i>	Number of income sources Stability/reliability of income sources Rice stock / ability to buy rice Access to capital (credit, loans)
	<i>Social sphere</i>	Level of cooperation Trust Level of conflict
	<i>Political sphere</i>	Resources use rights & access to resources Access to information Political participation in decision making
C O N T E X T	<i>Infrastructure & Services</i>	Access to secondary school Quality of education services Access to basic health facilities Quality of health services Condition of roads and bridges Access to market places Access to communication facilities

† Note that for some spheres more than 3 indicators were used to be more comprehensive.

If using a purposive sample, schedule discussions with the monitoring team to review the results and to judge the quality and accuracy of data.

C. Select respondents for household interviews

If there are 20 or fewer households in a community, survey all households. If there are 21-60 households in a community and if the population is homogeneous with no special patterns in distribution of households, then select 20 houses randomly (e.g. by writing all the household numbers down on small pieces of paper and blindly selecting 20). If there are more than 60 households in a community, survey one-third of the houses to have a representative sample.

There are many ways of doing random sampling. One possibility is to map and number all the houses of the community and then to pick on the first of every three households, i.e. house numbers 1, 4, 7, 10, etc. (see Box 22). If possible, seek professional advice from the government statistical service regarding the most suitable sampling strategy.

Step 4. Train staff and perform the survey

A. Train staff

Develop a staff training programme. Training should cover interviewing techniques as well as data handling. The type of training depends on the detail of data collection, and the methods used.

If the number of communities and respondents is small, it may be sufficient to train just one survey team. For surveys covering a large number of communities, a large area and a large number of respondents, plan a ‘training of trainers’. These trainers can then prepare multiple survey teams to carry out the data collection.

Timing is important. If too much time elapses between the training and the surveys, the data quality diminishes.

Box 22. Selecting households in Kutai Barat

We used a simple sketch map of Kutai Barat to sample one-third of all households (Figure 11). We selected one house, then skipped two, selected the next one, skipped two and so forth.

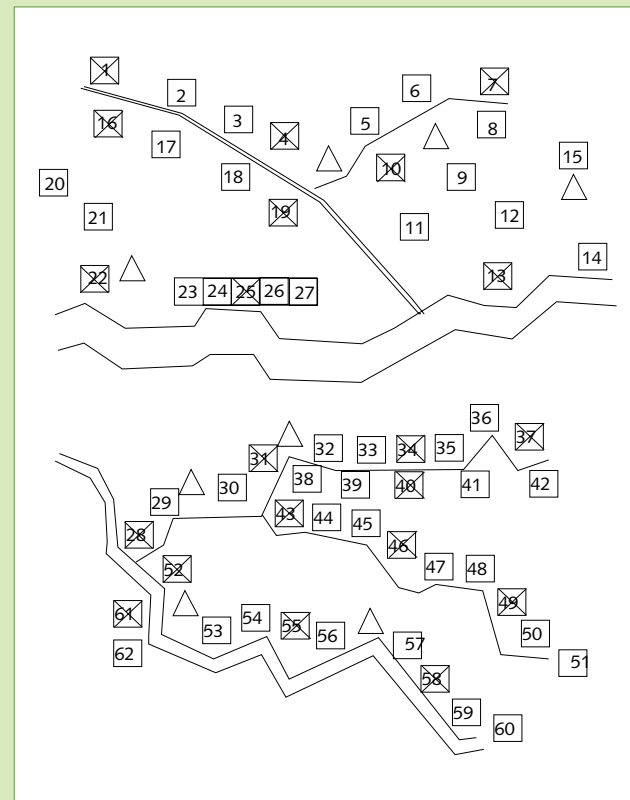


Figure 11. Example respondent selection. Households (numbered squares) marked with ‘X’ were selected.

If the sampling is conducted regularly, conduct a refresher training session before every survey to maintain quality.

B. Assign responsibilities for data collection, processing and analysis

Clearly define responsibilities within the team. This is essential to ensure smooth implementation of the survey. Carefully supervise the use of funds. Research existing prices for transport, accommodation and other expenses. Often the budget for surveys is limited, so the efficient use of available funds is crucial.

For the survey team, incentive-based compensation can be helpful. For example, in Kutai Barat, data collectors received payment for each completed questionnaire. However, be sure to follow up in the field and crosscheck data collection to minimise misuse of incentives and to verify quality.

Once the data collection is completed, arrange for data processing and analysis. Local government may not always have the technical know-how for data processing. In that case, either provide additional training or outsource the data entry and analysis. However, one problem may be that the trained staff may change jobs or be transferred to other parts of the government. Try to provide training for local community members as well, for instance, to become monitoring assessors. This will increase local capacity.

If data processing and analysis is outsourced, clearly define what information the data analysing party should provide. Carefully supervise the process.

Step 5. Analyse and present the data

The survey results are useful only if they are presented in a clear and meaningful format. One way to do this is to create an

index for each government sector or poverty sphere. An index is a single number that combines information from all questions related to a topic. Indices are easy to understand because they summarise the results of questions into a single number. An example is a health index, which might combine the results of several questions related to health.

A. Calculate an index for each sphere

To create an index, add the values (3 points for 'good', 2 for 'intermediate' and 1 for 'critical') and normalise them so that questions can be compared with each other (see Box 23).

Calculate an index for each sphere. Present the results graphically to help users visualise the results (see Box 23). Box 23 provides an illustration for the health sphere. All responses to the questions related to health in the survey carried out in Kutai Barat were combined into one index.

Box 23. Calculating a health index

The health sphere in Kutai Barat consisted of three indices: 'food shortage', 'availability of clean drinking water' and 'access to healthcare' (see Box 21). Each indicator had a value range from 1 to 3. If the values are added up, the maximum is 9, the minimum 3. The following formula can be used for normalising values (i.e. fitting them between 0 and 1):

$$(\text{total value} - \text{minimum value}) / (\text{maximum value} - \text{minimum value})$$

If, for instance, the average indicator values of a community are:

Food shortage: 1.75

Availability of clean drinking water: 2.23

Access to healthcare: 1.95

Then the index value is:

$$(1.75 + 2.23 + 1.95 - 3) / (9 - 3) = 0.488 \text{ (or 48.8\% of the maximum value).}$$

B. Present the indices in a table

Once you have calculated all the wellbeing sphere indices, it is time to present the monitoring results to decision makers. There are many different ways to present data. One way to compare communities quantitatively is by listing the wellbeing sphere indices in a simple table. Use colours to identify whether each sphere is critical, intermediate or good.

Box 24 shows the indices that were calculated from the indicators of each sphere. The colour code shows whether an index is in critical, intermediate or good condition. The boundaries between the three colours depend on the indicator value ranges of each sphere. Some indicators might only have two possible values—i.e. score 1 (critical) and score 3 (good)—while others offer three—i.e. including score 2 (intermediate);

thus, the boundary of critical (red) is somewhere between 0.333 (if all indicators have a range of 1-3) and 0.5 (if the values are 1 and 3, without 2) depending on the respective sphere.

C. Present the results in the NESP format or bar charts

Not everyone likes reading tables. If you want to present the results in a more attractive way, use the NESP model (see Part I) or bar diagrams. The NESP model allows users to compare households, communities or subdistricts at a glance (see Figures 13 and 14 for an example from Kutai Barat in 2006).

Each way of graphically representing poverty data has strengths and weaknesses. While NESP gives a quick overview of the overall poverty situation of a community

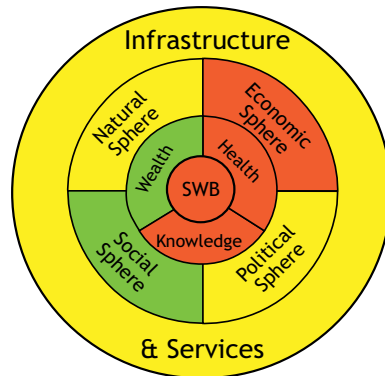
Box 24. Data list with colour code (village names have been changed)

Community	SWB	H	W	K	N	E	S	P	I&S
Durian	0.52	0.67	0.49	0.48	0.75	0.48	0.60	0.43	0.67
Rambutan	0.53	0.55	0.70	0.51	0.86	0.61	0.63	0.49	0.71
Kelapa	0.27	0.56	0.32	0.46	0.88	0.62	0.58	0.49	0.71
Mangga	0.03	0.31	0.33	0.37	0.72	0.35	0.38	0.33	0.35
Lai	0.57	0.90	0.54	0.44	0.91	0.92	0.53	0.41	0.81
Jeruk	0.25	0.40	0.48	0.39	0.75	0.42	0.59	0.41	0.36
Salak	0.38	0.40	0.44	0.31	0.70	0.66	0.74	0.75	0.46
Pisang	0.32	0.35	0.41	0.33	0.43	0.56	0.53	0.40	0.39
Jambu	0.25	0.58	0.51	0.36	0.56	0.67	0.53	0.51	0.33

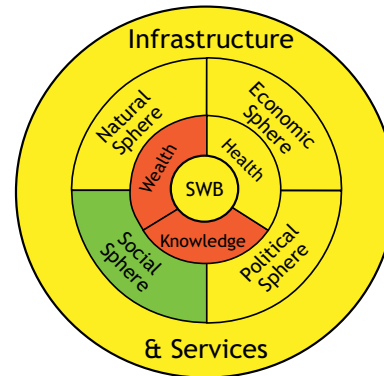
Notes: Red = critical; yellow = intermediate; green = good.

SWB = subjective wellbeing; H = health; W = wealth; K = knowledge; N = natural sphere;

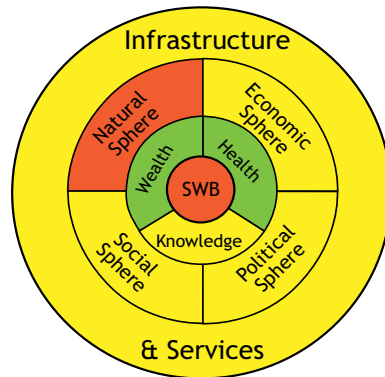
E = economic sphere; S = social sphere; P = political sphere; I&S = infrastructure and services.



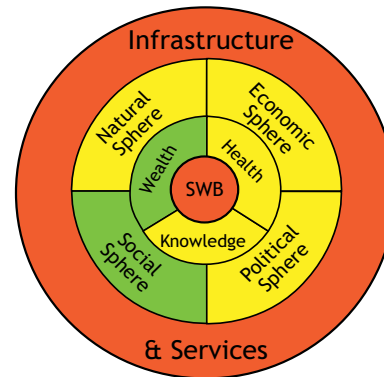
Village A



Village B



Village C



Village D

Figure 12. NESP representations of wellbeing/poverty spheres in four communities in Kutai Barat (February–March 2006).

(or household or subdistrict, etc.), including critical sectors and possible trade-offs, bar diagrams show a more nuanced picture that also allows the comparison of indices of the same colour code in a more quantitative way.

Both versions instantly show which sectors are in a critical condition. In the bar diagram example of Figure 13, Community A lacks knowledge and healthcare and has problems in the economic sphere, Community B lacks knowledge,

while Community C clearly has environmental problems, and Community D suffers from inadequate infrastructure and government services. All these red spheres are alert signs for the respective government agencies that need to follow up with a more in-depth analysis of the underlying causes.

When reviewing the results, keep in mind that there is no natural distinction between the poor and the non-poor. Every poverty line is based on a certain poverty

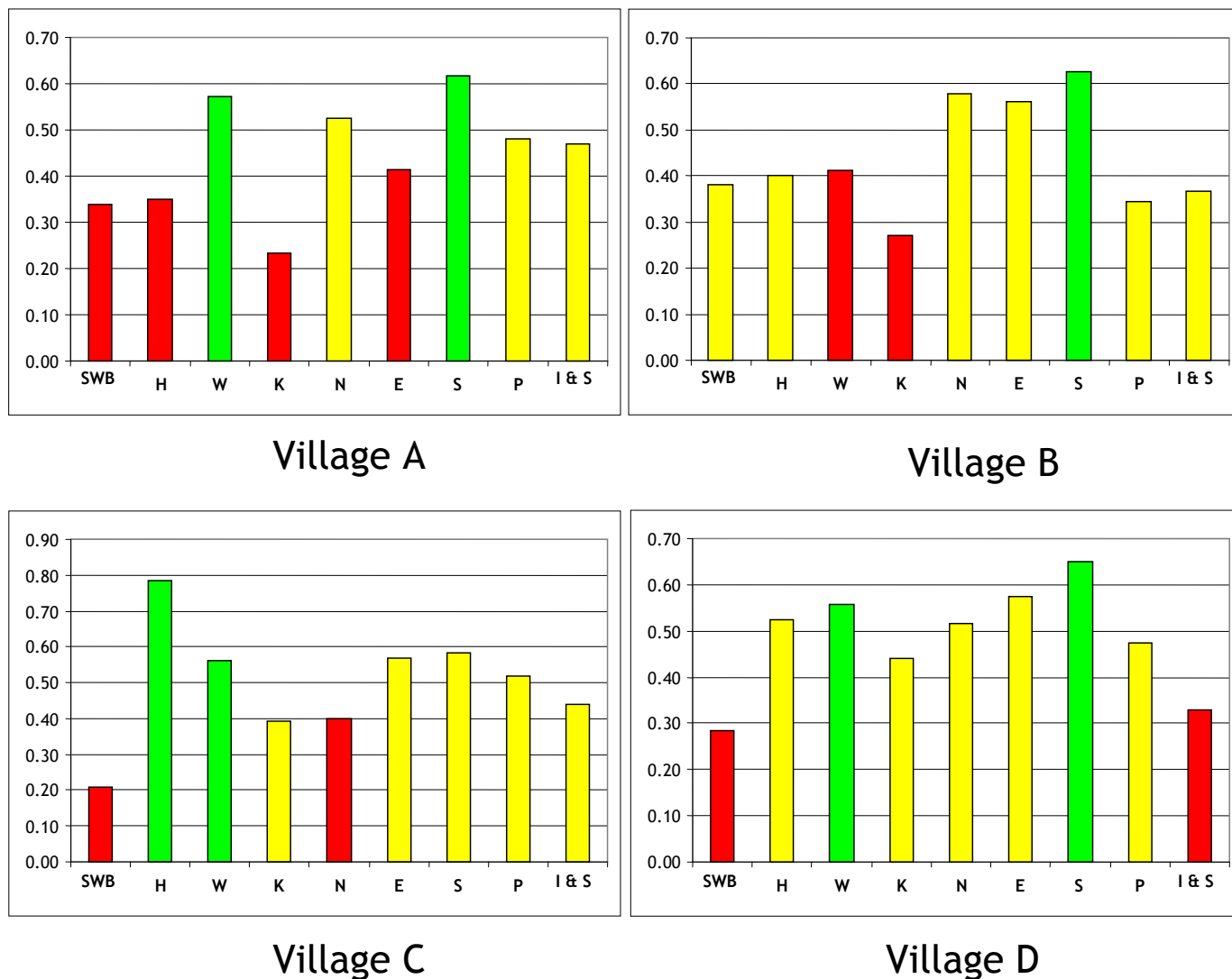


Figure 13. Bar diagrams of poverty sphere scores for the same 4 communities as in Figure 12. Abbreviations as per Box 24.

definition. In this example, a local monitoring team defined 'poor' (i.e. score 1 or red colour) by using local concepts of poverty and wellbeing (see Step 2A). However, this definition is not permanent. If living standards change, the meaning of what deserves a critical score will also change.

D. Create poverty maps

Poverty maps show where poverty hotspots are. Figures 14 and 15 show poverty maps that were created for Kutai Barat. Develop a poverty map for each wellbeing sphere by locating the results by community on a map (see Tool 1 for a more complete description of this process).

Poverty maps help answer the question 'Where are the poor?' However, the patterns revealed by the poverty maps do not automatically provide answers to the problem 'Why are they poor?' The maps can only show correlations between different aspects of poverty. Nonetheless, these correlations are a good starting point for understanding the underlying causes of poverty.

Step 6. Present findings

After collecting and analysing the poverty monitoring data, present the findings to the communities to discuss the following questions:

- Compare the findings to their real life experience. Do the data reflect the real situation?
- Compare the results from their community with neighbouring communities. Why are there differences?
- Are the results useful in understanding poverty?

Discuss how they can use the information. Suggest that they can use the results to identify the community's development priorities and justify action plans for the next year(s). An example of a community-based follow up after a wellbeing-poverty monitoring in Kutai Barat, using the NESP

model, is described in Box 25. Suggest that the communities participate in scenario-based planning (see Tool 4).

Share the results with local government:

- Present the findings to local government members in a workshop. Discuss how to meet the needs of different offices or sectors. Encourage informal exchange among officials in different sectors. Identify needs for coordination.
- Publish and distribute a written report.
- Make sure that the data is easily accessible to anyone wishing to find additional information during the course of the year.

Figure 14. Health aspects of poverty in Kutai Barat, 2006. Each coloured dot represents the health situation of a community.

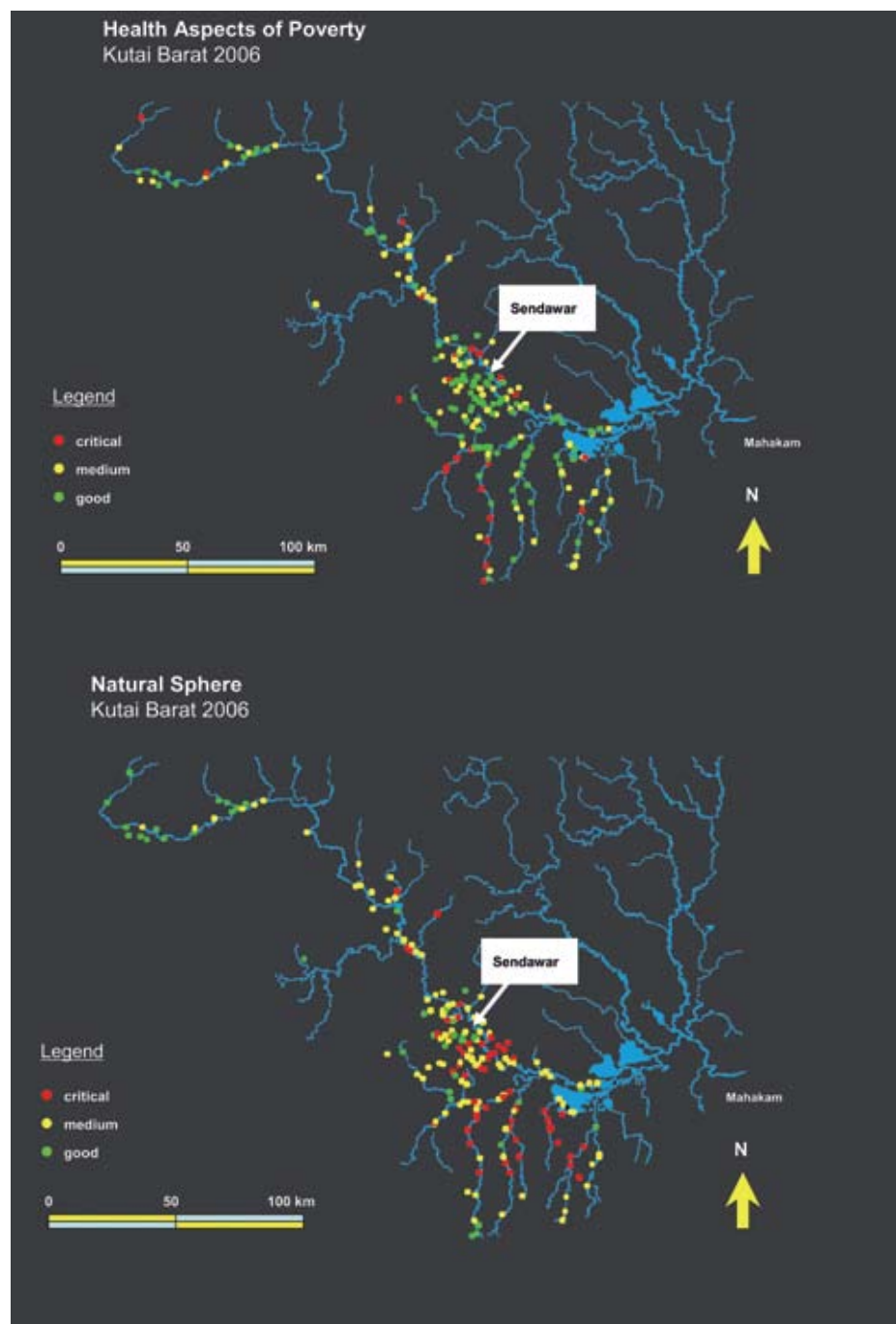


Figure 15. Condition of natural sphere aspects, Kutai Barat, 2006. Each coloured dot represents the condition of the natural environment of a community.

Box 25. Local poverty indicator-based development planning at the community and subdistrict level

After the household wellbeing survey in Kutai Barat (2006), we reported the results back to the communities. The community members first discussed the validity of the data and then used the wellbeing poverty colour diagrams to identify the most critical wellbeing aspects. They discussed the causes of these problems and then compiled a one-year action plan and submitted it to the subdistrict planning session.

The various proposals were reviewed at the subdistrict level. Authorities discussed intercommunity problems, such as polluted rivers and poor road access, and they looked for solutions together. They checked the activities proposed by the communities against the development priorities resulting from the surveys and NESP analysis, and reviewed the rationales provided by the communities. The authorities then developed the annual subdistrict development plan, which reflected the targeted priorities and available resources. Figure 16 shows the principal monitoring and planning cycle.

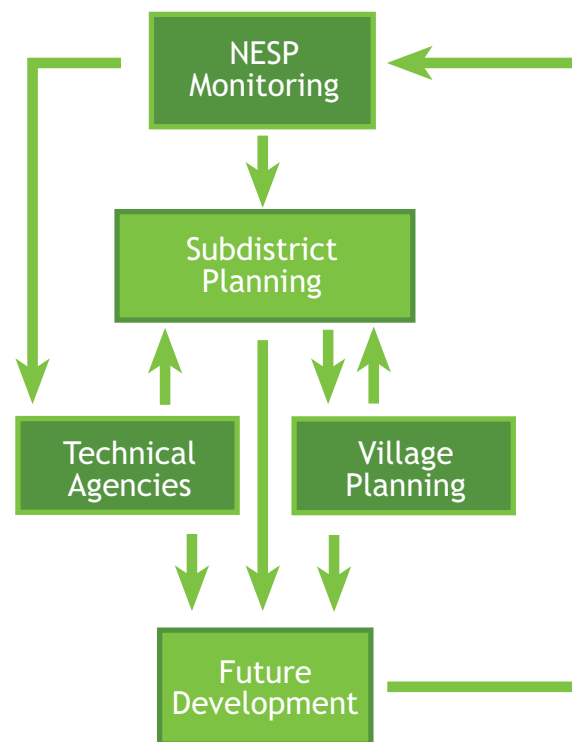


Figure 16. Monitoring and planning cycle in Kutai Barat.

Box 26. Tips for getting started

Developing a poverty monitoring system is easier than it sounds. Statistical agencies or university scholars can help with the sampling strategy, data analysis and with team training. In many cases, it might even be sufficient to add some indicators to ongoing monitoring programmes in order to get a more comprehensive poverty picture (as in NESP). The best way to get started is:

- Find out which poverty monitoring programmes already exist
- Identify the gaps and deficiencies of these programmes (e.g. indicators are not locality specific, poverty is only defined by income or consumption)
- Develop your own poverty model (NESP can be used as a starting point)
- Develop (additional) poverty indicators to bring your model to life
- Discuss the design and logistics of the (new or amended) poverty monitoring system with your statistical agency, academicians or others (NGOs, projects) who are willing to help
- Test your monitoring system in at least two trials and refine it until your findings reflect the real poverty situation of your area
- Institutionalise your poverty monitoring system to ensure sustainability

- Publish your findings and report back to communities
- Link the monitoring programme to the development planning system of your area
- Check the validity of your poverty model every 5 years—poverty causes can change!

You can find a full description of the NESP model in:

Gönner, C., Haug, M., Cahyat, A., Wollenberg, L., de Jong, W., Limberg, G., Cronkleton, P., Moeliono, M. and Becker, M. 2007 Capturing nested spheres of poverty: a model for multidimensional poverty analysis and monitoring. Occasional Paper No. 46. CIFOR, Bogor, Indonesia.

The following manual describes step by step how the poverty monitoring system of Kutai Barat has been developed and implemented:

Cahyat, A., Gönner, C. and Haug, M. 2007 Poverty monitoring manual. CIFOR, Bogor, Indonesia.

Tool 3: Evaluating local government programmes through community focus groups

What is community evaluation?

Community evaluation is a way for local government to learn whether programmes are having the desired impact. There are many ways to conduct evaluations—the tool selected for this source book deals with focus group interviews. Focus groups are panels of similar individuals brought together to discuss or evaluate specific topics guided by a facilitator. Focus groups provide a quick and cost effective means of collecting a diversity of opinion drawn from the selected group. For our purpose here, focus group members are from communities that were the intended beneficiaries of the government programmes being evaluated. They should know how well the programme was implemented and whether it had the intended outcomes and impacts. As a result, focus groups can provide valuable feedback for governments attempting to respond to the needs of their constituents.

Once completed, the results of several focus groups are compiled and summarised in a narrative report, which can include quantified scores and graphs. This information is then reported back to local government as input for their next cycle of planning and decision making.

Why is community evaluation useful?

Communities are the beneficiaries of many government programmes. However, these programmes frequently do not meet local needs or improve wellbeing. Often governments do not learn of such problems until it is too late to adjust the programme.

Community evaluation provides a channel for communities to articulate their views and communicate

with government officials. It can be used to meet legal requirements for community participation in government decisions. Besides, a more complete understanding of poverty and wellbeing is possible when communities can voice their opinions about the programmes that affect them.

Community evaluation provides:

- Citizen input into government decision making through feedback about the implementation, outcomes and impacts of local government programmes;
- A process that empowers the poor through improved understanding of the workings of local government and what they should be able to expect from its programmes;
- An opportunity for local government to communicate about its programmes and build relationships with community members;
- More transparency about the implementation and quality of government programmes.

This type of evaluation can also help local government to focus better on the issues of most concern to its constituents. Local government officials tend to monitor only certain aspects of project implementation, such as expenditure and physical outputs (e.g. the number of water pumps purchased). This is usually a requirement set by higher levels of government, primarily for accountability. Communities may wish to focus on actual impacts (e.g. the number of households with access to pumped water or whether the pumps actually function) rather than on programme outputs. Independent monitoring of programmes can provide a check to government reporting. Evaluation can also provide information about redundancies or inefficiencies in programmes.

When organising focus groups, make sure that the benefits of participating in the evaluation are clear. Communities have an incentive to participate when the information from the

assessment feeds into government planning and improves communication with the government. Local government officials should be motivated to participate in order to increase the efficiency and effectiveness of poverty alleviation programmes and to gain support from their constituency.

Box 27. Focus group discussions

Focus group discussions are an efficient, cost effective method for capturing a variety of views held by community members. They can also enable the sharing of information about government programmes. Focus groups work best if the participants are grouped by interest or identity; for instance, grouping women, men, young people, old people, community leaders or elite, or different ethnic groups. The number and composition of the focus groups should be adjusted to the local conditions. As a rule of thumb, focus groups should be composed of 5–10 people to ease facilitation and note taking.

Focus groups can have problems with group think or similar group dynamics that influence people's views. However, there are some steps that the facilitator can take to avoid these problems. For instance, the influence of community leaders or elites on others can be reduced through the use of secret ballots for evaluations.

Managing focus groups requires strong facilitation skills. If there are no skilled facilitators available, it is not advisable to use this method. However, in some cases it is possible to design a discussion process that reduces the need for experienced facilitators.

Box 28. Not yet responsive in Indonesia

In theory, decentralisation helps government to be more responsive to its citizens. Ideally, people have more opportunities to make demands and give feedback to their local government when decision makers are at the local level. However, in practice, decentralisation does not automatically generate more responsive governance.

Indonesia's experience is instructive. Because of 32 years of authoritarian rule and centralised government under Soeharto (1965–1998), district officials in Indonesia have little experience with bottom-up planning. Civil society organisations are weak after being repressed, dismantled or banned for decades. Although some laws stipulate local people's participation, the laws are rarely enforced. The Department of Internal Affairs developed a manual on participatory village development planning and conducted training in applying the methods, but in 2006 district staff still did not use the methods.

There are many reasons why local government has not become more responsive:

- Many officials do not value the input of communities. They are more interested in maintaining their status as government officials and look down upon villagers;
- Officials often do not want to travel to remote villages;
- The districts' main concern is upward accountability to national authorities for the budgets received; therefore, district officials tend to focus on physical and financial indicators associated with implementation as measures of a programme's success;
- The districts seldom collect information about how well programmes work; furthermore, communities often lack experience and skill in communicating their needs;
- Finally, the organisational culture of the districts is strongly hierarchical and rife with opportunism; problems of collusion, corruption and decision making for personal gain make district officials reluctant to monitor outcomes.



Community evaluation step-by-step

The tool consists of eight steps, from defining the purpose of the evaluation to improving government programmes. The process of organising and applying focus group discussion is explained in a step-by-step manner (shown in Figure 17).

Step 1. Define the purpose of the evaluation

It is important to agree upon the purpose and expectations of the evaluation from the very beginning. Organise meetings with local government officials and community leaders and discuss the following points:

- What is the purpose of the evaluation? Is it to improve the implementation of an ongoing programme or to improve the planning of future projects?
- Who is the main driver of the evaluation? Is it the local government that needs feedback on its programme implementation? Is it the community that complains about mismatch between needs and government assistance?
- What are appropriate focus groups? How should the diversity within the community be captured?
- Who should facilitate the evaluation? Contracting a trained facilitator could reduce conflicts of interest or manipulation of the participants, but

Box 29. Time and materials needed for community evaluation

- 2 days for planning
- 2 days for training facilitators
- 2 days per community depending on the availability of community members
- 2 days for follow up presentations
- Flipcharts, markers, masking tape, scoring cards.

Team and participants

- 2 facilitators
- 1 note taker
- Approximately 10 participants per focus group (number of focus groups can be three or more, if circumstances allow).



Figure 17. The process of organising and applying focus group discussion.

can the added cost be covered or will an outsider lack knowledge about local dynamics?

- What will happen with the evaluation report? Can it be sent directly to the local government or should it be shared with the mass media to avoid it being too easily hidden?
- How will the evaluation be linked to the local development planning process? And how can it be institutionalised?

Once the discussions are complete, the organisers compile a brief statement of purpose for the evaluation, explaining the methods and goals as well as ensuring that government agencies and communities understand the process and the expected outputs. The statement should then be distributed to local government officials and communities.

Step 2. Decide the timing of the evaluation

The timing needs to be adjusted to the annual planning cycle of the local government. Coordinate the timing with the local government to ensure that the evaluation report can be fed back into the official planning process. The evaluation should also precede the annual community planning (see Tool 4), so that lessons learned from the previous year can be incorporated into the new development plan.

Step 3. Recruit facilitators

Identify interested and suitable organisations or individuals to perform the evaluation and facilitate the activities. Facilitators must be experienced at running meetings, encouraging discussion, and balancing diverse opinions. Facilitators might be from the communities, the local government or from an independent organisation. Drawing from all of these groups is highly recommended,

Box 30. Comparison of facilitators

Facilitation by	Pros	Cons
Community members	Have direct experience with programme Have direct incentives for involvement	May not have sufficient capacity May have a vested interest that biases the results
Government officials	Know the programmes that have been implemented Can directly use results for planning Could implement community evaluation on large scale (also as a monitoring system)	Have limited experience with community facilitation Depend on political will (and funding) from government decision makers May have a vested interest that biases the results
Civil society organisations	Often have experienced facilitators Have less vested interest (ideally)	Lack direct knowledge of the programmes Need to be paid Might lack the funds for repetitions

though some consistency is needed to allow tracking changes over time. Decide carefully—the facilitators should not have any personal interest in the outcome of the evaluation.

- *Community members* can facilitate if they are sufficiently experienced. However, there are drawbacks to using community facilitators, as they may have a vested interest and try to influence the process disproportionately. In addition, some communities may lack the capacity to conduct the evaluation by themselves.
- *Local government officials* may be good facilitators if there is political support in government for the process. The involvement of government officials means that the evaluations can be repeated in many locations, and possibly be repeated annually. The results of a community evaluation led by local government can directly feed into the government planning process. Government officials, however, may influence what people say in the meetings. Community members may feel inhibited when expressing negative or critical views about the government's work.
- For a more independent

evaluation, involve *NGOs, universities* or other *independent organisations*. These organisations are more likely to have skilled facilitators. However, this might incur additional costs. Because the evaluation should be performed yearly, the costs of having an independent organisation perform the evaluation must be budgeted annually.

Box 30 summarises the pros and cons of facilitation of community evaluations by different actors.

Step 4. Identify and select the participants

In each community, there will be certain people who are most familiar with a programme's implementation and impacts. The nature of the programme will determine who should be included in the evaluation. For instance, parents can provide information on education programmes, while youths will be knowledgeable about a recently built sports facility. Some projects have impacts on everyone. In those cases, ask a diverse representation of the community to participate in the evaluation. Try to have representation of all groups within the community. Weaker or marginalised participants can form a separate group where they feel more encouraged to voice their own opinions.



Photo by Michaela Haug

Identify the participants most familiar with a programme's implementation and impacts.

Box 31. Sample form used for community evaluation of poverty reduction programmes in Malinau.

Sector	Project or programme	Source (district, national government)	Evaluation of implementation	Evaluation of impact	Comments
Education					
Healthcare					

Step 5. Develop a data collection form

Create a simple form for collecting data. This form will focus the discussion and data collection on the most important issues and make compilation of results easier. (See Box 31 for an example.)

Step 6. Facilitate the evaluation activities

The steps below describe how to facilitate the evaluation using focus group discussions.

- List the programmes to be evaluated. Write down a list of the programmes that should have been implemented in the community. Identify which agency is responsible for each programme. Additional sources of information can include government annual budget allocations and reports, interviews with government officials, and interviews with community leaders.
- Identify the expected outcomes and impacts of each programme. Discuss the expectations of each programme:
 - What was the programme supposed to do?
 - Who was it supposed to help?
 - How many individuals or communities should have benefited?
 - How long was it supposed to run?
- Note these discussions in the 'Comments' area of the form.
- If programmes are nationally driven, compare expected outcomes as reported in national government documents with community expected outcomes to observe and understand how and why they differ.
- Discuss the actual implementation and impact of each programme:
 - Who participated?
 - How were decisions made?
 - How was the budget used?
 - Were the technical specifications met?
 - Who benefited from the programme?
 - How could the implementation have been better?
 - How could the programme have had better results?
 - How should reporting be done?

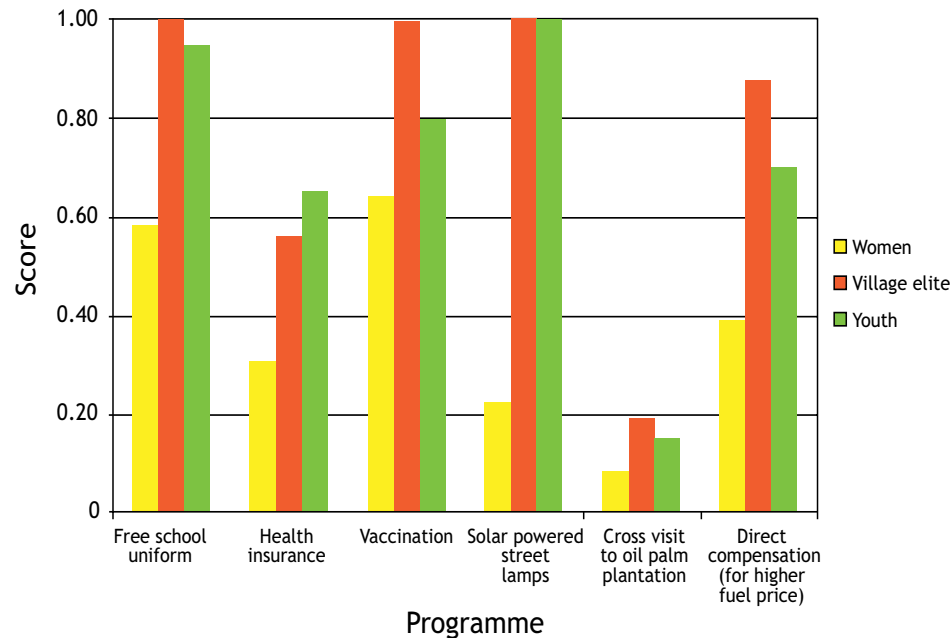


Figure 19. Comparison of normalised focus group evaluations in one community in Malinau.

Be careful that the results are not misinterpreted. For example, percentages can be misleading if only a few people were involved in a focus group. For instance, if 100% of the people agreed on a positive evaluation, but there were only two people in the group, then this high percentage score has little significance.

Step 8. Use results to improve programmes

The results of the evaluation should be channelled into the local government's evaluation and planning cycle. Theoretically, a number of offices ought to be interested in this information, such as the agencies responsible for the evaluated projects, the planning agency, the agency responsible for fiscal accountability, and the representatives elected by the people. Alternatively,

communities and organisations outside of government can use the results to draw attention to weak programmes or call for change. Responsiveness is more likely where there is pressure from both outside and inside the government.

It is important that the evaluation results are communicated to a broad audience, including community members, local government and other local institutions. The communication strategy can include the following actions:

- Distribute the results to participants and other community members; post the results in a public place so that everyone can see and discuss them;
- Organise a community meeting to present the results; ask the community to brainstorm on how they might use the results;

Box 33. Example of scores from focus groups†

Sector	Project	Community A			Community B		
		Elite	Women	Youth	Elite	Women	Youth
Education	Free school uniform	0.94	0.75	0.92	1.00	0.58	0.95
	Operational school funds	‡	-	0.15	0.25	0.47	0.60
	Free books	0.22	0.14	0.88	0.94	0.28	0.80
	Scholarship	N/A§	N/A	N/A	0.81	0.47	0.50
Health	Health insurance	0.72	0.29	0.69	0.56	0.31	0.65
	Immunisation	1.00	1.00	0.92	1.00	0.64	0.80
	Supplementary food for children < 5 years	0.72	0.93	0.73	1.00	0.14	0.85

† Scores from two communities on impact of several education and health programmes. Scores range from 0 (very negative impact) to 1 (very positive or good impact).

‡ In the discussion with the elite this project was not mentioned, so no score was given.

§ N/A, not applicable.

- Facilitate a discussion of the results as part of the annual community planning (see Tool 4);
- Organise presentations where community members can share their results with local government and other communities; invite external audiences such as regional government, and environmental and development organisations;
- Involve the local press; provide them with written materials; suggest that participants talk about the exercise on a radio programme.



Photo by Michaela Haug

Box 34. Examples of comments given in community evaluation, Malinau

EDUCATION

- Free school uniforms:
 - Number of uniforms not sufficient
 - Size—some uniforms did not fit
- School operational funds:
 - Information about programme not clear
 - No control over implementation
 - Not appropriate to local conditions (prices in Malinau are relative high)
- Free school books:
 - Number not sufficient and not all books are provided
- Scholarships:
 - Information about programme not clear
 - Amount provided does not consider difference in expenditure at different levels of education
 - No control over implementation
 - Scholarships from the district government not yet received.

HEALTH

- Health insurance:
 - Not all people received insurance cards (unclear eligibility)
 - Service at health centres not satisfactory
 - Procedure to use insurance too bureaucratic
- Immunisation:
 - Implementation erratic
 - Some children got infections from vaccination
 - No additional general medical service provided during visits of health staff to provide immunisation.
- Supplementary food for babies under 5 years old
 - Amount not enough and delivery erratic.

Box 35. Tips for getting started

Focus group discussion for evaluating government programmes is a good way of improving communication between local government and communities, but might be perceived as sensitive or even threatening. Thus, the initial approach is important to avoid misunderstandings. To achieve the best results with this approach think about the following points to get started.

- Organise informal discussions or meetings with local government and institutions to present the concept. The discussion should include: what is the aim of the survey, which sectors' impacts are interesting/relevant, what are key agencies to involve. It is important to discuss these with key decision makers to ensure good understanding, support and involvement. During this phase, a form can be developed to make documentation (and reporting) of the results easier.
- Train the staff who will conduct the focus group discussions. One way of training is to conduct a training session with all the survey team members. If limited time is available, on-the-job training can be done by gradually involving the team members in facilitating the focus group discussions.
- Prepare for going to the field. If government officials will conduct the focus group discussions, scheduling and budgeting may need (considerable) time. Timing of the survey will have to consider best timing for the communities that will be visited, as well as lead time for government officials to deal with bureaucratic requirements and obtaining budgets. During this time, communities should be informed (by letter or other appropriate means) that the evaluation is going to take place. The information should introduce the aim of the survey and explain the use of focus groups.

For more information on focus groups and community-based evaluation, see:

- Kreuger, R.A. 1988 Focus groups: a practical guide for applied research. Sage, London.
- Morgan, D.L. 1997 Focus groups as qualitative research (2nd ed.). Sage, London.
- Morgan, D.L. and Kreuger, R.A. 1993 When to use focus groups and why. In: Morgan D.L. (ed.) Successful focus groups. Sage, London.
- Stewart, D.W. and Shamdasani, P.N. 1990 Focus groups: theory and practice. Sage, Newbury Park, CA, USA.
- Wollenberg, E., Limberg, G., Iwan, R., Rahmawati, R. and Moeliono, M. 2006 Our forest, our decision. A survey of principles for local decision-making in Malinau. CIFOR, Bogor, Indonesia.



Photo by Kristen Evans

Tool 4: Communicating communities' needs through scenario-based planning

What is scenario-based planning?

Scenarios are pictures of a desired future. They are useful for exploring and communicating expectations people have about the future. Scenario-based planning can help people develop a vision, develop plans to meet that vision and communicate their plans to other people, including local government.

Why is scenario-based planning useful?

Scenario-based planning can help local governments understand communities' needs. It also helps communities:

- Make individual expectations, goals and future desires more explicit;
- Identify differences, unrealistic assumptions and common ground among participants;
- Reach agreement about a shared agenda—goals to work towards, priorities or pitfalls to avoid;
- Develop a plan broken down into steps defining *how* and *when* each step will be carried out and *who* is in charge of doing it;
- Develop skills for collaborative planning;
- Create ownership and accountability for implementing the plan;
- Document changes in people's visions.

Decision makers in local government need a clear understanding of people's needs and expectations in order to be responsive to poverty. One way to reach this

understanding is to have people communicate their needs better to local government.

Communication often does not occur effectively where there has been a poor history of citizen involvement in government and difficulties in communication due to distance, cost or lack of infrastructure. Typically, communities lack the means and experience to create proposals that represent the interests of their whole group. People sometimes lack information or misunderstand their role in government planning and may react counter-productively or not act at all. Because of these weaknesses, when communities do communicate with government officials, their input can unintentionally:

- Reflect the narrow self-interests of a few individuals;
- Exclude some stakeholders, particularly minorities, the powerless and the poor;
- Lack documentation crucial for transparency and accountability;
- Be divorced from long-term or strategic thinking.

Scenario-based planning can overcome these issues by enabling a community to collectively define its proposals and present them for local government planning.

Box 36. On the ground in Bolivia: Problems with the municipal planning process

In Bolivia, representatives from local government complained that rural communities did not participate actively in or fully understand the municipal planning process. At municipal planning meetings, elected community leaders were often absent or, when they did appear, frequently came unprepared or with proposals that were not based on public consultations. Because most residents were not engaged, municipal authorities felt their work was not acknowledged and that it was almost impossible to completely satisfy the shifting expectations of community members. On the other hand, community members argued that they did not commonly hold meetings and were unsure how to overcome apathy and internal conflicts to develop collective proposals. Furthermore, they argued that it was difficult to prepare for the municipal planning meetings since they rarely received advance notice and scheduling was chaotic. Communities often did not appreciate municipal projects because they did not address their priorities.



Photo by Kristen Evans

Abandoned municipal projects, such as this unfinished well, are common when communication is poor between communities and local governments.

Scenarios for planning step-by-step

The tool consists of two methods: identifying a community's vision, called *Visioning*, and developing a pathway or plan to achieve that vision, called *Pathways*.

The methods can be used separately or together. When both are used, Visioning usually comes first, followed by Pathways.

Visioning

Visioning is a technique to help participants imagine an ideal future for their community. It is primarily a goal-setting exercise. The method creates personal spaces for reflection where people feel free to express their hopes and share their dreams for the future. Community members then share their visions and arrive at agreement about priorities

Box 37. Time and materials needed for visioning

- 2 days for planning and gaining familiarity with the community
- 3–4 hours for a workshop
- 1 day to prepare and present results and follow up
- Drawing pads, flipchart, markers, masking tape.

Team and participants

- 2 facilitators (can be local officials or professionals)
- 2 note takers (can be from the village)
- 15–25 adult participants.



Figure 20. Sequence of methods in scenario-based planning.

and goals for the community. These goals serve as the starting points for action plans for community development.

Visioning results in a shared image of the future in the form of a written document or graphic, such as a sketch drawing. Documentation not only helps group members analyse their diverse visions, but also produces records that provide accountability for participants.

Step 1. Organise

Facilitators who are not familiar with a community should plan on spending time in the community prior to the workshop. This provides them with opportunities to talk about the issues and concerns confronting families and to learn about people's daily activities. Facilitators should try to engage as many people as possible—particularly those who seem to be more marginalised—in informal conversations or chats about their lives and the community.

Discussion questions include:

- What is your community like?
- What are the families like?
- What is the land and forest like?
- What do people do for a living?
- Why are some people better off or poor?

It might be helpful to provide a map or photographs of the community to encourage reflection. Spending time in the community prior to the activity also encourages participation by providing an opportunity to invite community members directly to attend the workshop.

Step 2. Develop the vision

The most important step in any visioning exercise is helping participants leave behind the worries of today, focus

on the activity, and use their imaginations to think creatively about an ideal future. This may sound easy, but this step is surprisingly challenging. If not facilitated carefully, the visioning will not produce insightful or useful analysis later.

First, engage the participants and create a relaxed atmosphere where people are comfortable imagining possible future outcomes.

Next, choose a specific point in the future for people to imagine. This can vary depending on the needs of the facilitators, but it may be helpful to choose a point in the distant future that will allow participants to disengage from current problems or conditions that may constrain the options they consider. The facilitator should lead the process by balancing open-ended questions that will encourage the imagination with more specific guided questions to ensure that the key issues are considered by each participant.

Request that participants relax, close their eyes, and clear their minds. Start them on an imaginary trip into the future. Here is a possible script to start:

We are going to take a walk 20 years into the future, so first we will have to make time speed up. As I count to 20, you are growing older. Your children have grown, the community has changed, it has improved. Life is getting better, everyone is happier. Problems have been solved. When you open your eyes, you will be here, but 20 years in the future.

Elaborate as much as possible to try to stimulate the participants' creativity. However, be careful not to tell them what they see in the future—that is their job! Here is an alternative script:

Imagine that you have left the community. After 20 years without contact, you return to

find that things have turned out well. You are walking around and observing the community. Describe (silently in your mind) how you know things are better: What does the community look like? What are the houses like? What are people doing? Who do they see? What do you notice about the forest, land, streams and farms? What has changed? What has not changed?

Depending on the group, the facilitator may wish to modify the method. Some stakeholders may feel uncomfortable sitting quietly ‘day dreaming’, others may not be engaged by simply listening to the facilitator. One solution may be to lead the group on a walk around the community. Stop at specific points in and around the community, such as the stream, the well, roads, schools, agricultural areas and houses, and ask them to describe what they ‘see’ in the ideal future. Encourage the free flow of ideas, and try to make sure that everyone is participating.

During this step, participants think about and express their *personal* vision of the future. It is helpful to have participants write down or draw the things that stood out most in their vision. In the next step, participants will share their individual visions and compare them with others’ visions.

Step 3. Share visions

After developing their personal visions, it is time to have participants share their ideas. There will likely be many similarities, but people may also be surprised to hear how different other visions are.

Organise participants into smaller breakout groups of 4-8 people in each group. This allows everyone time to present his or her vision. Small groups also create an atmosphere where people feel more comfortable talking and sharing. Be aware of local dynamics to ensure that productive and open discussion takes place. Some individuals dominate discussions, others are shy. Some do not want to work together because

of conflict. In these smaller groups, ask the participants to share their vision as drawn, written or remembered. Groups may wish to share a large poster board to combine their ideas so that everyone can participate at the same time, and so that those without reading skills can also contribute. Groups might choose to write out a list of ideas instead.

This step can also be done without guidance from the facilitator, allowing the participants to organise themselves and decide how they will complete the task. Designate a group leader and provide guidelines to ensure that group discussions are open and inclusive, everyone gets a turn to talk, all ideas are valued, etc.

Step 4. Compare visions and reach agreement

After the breakout groups have finished their visions, everyone returns to the workspace. Have each group present its work, posting all of the visions, whether they are drawings or lists, where they can be seen. Then ask the entire group to discuss and compare the visions.

Discussion questions include:

- What seems to be most important in each vision?
- What do the visions have in common?
- What is different between them?
- What is most surprising to you?

The next goal of this step is to reach agreement about the group’s collective vision of the future. Individuals may not agree on everything, but there should be enough common ground that participants can agree that the common vision reflects their views. Discuss whether the vision is complete and representative of the community.

Discussion questions include:

- Are these the most important ideas for the community?

- What is missing?
- Is there anyone whose opinion is not included here?
- How can you use these ideas for planning?

As an optional step, the community may want to define priorities for their annual plan. If so, after the group discussion, ask the group to identify key points from the visions and post the list of ideas on the wall to vote on them. Each person receives several tokens to represent their preferences. The tokens are taped next to the ideas or placed in envelopes next to the ideas that are the most important to the voter. Count up the votes and rank the ideas from those with the most votes to those with the least. This activity requires that the participants share their ideas, understand the concerns and visions of the other participants, and prioritise them together to arrive at a consensus. It also gives an equal voice to all participants.

Collect the results and prepare them for distribution to community members.

Step 5. Communicate the results

It is important that the results of the activities are communicated to as many local people as possible, including community members, local government and local institutions.

- Create products that catch people's attention.
The products could be posters, maps, cartoons or illustrated stories. Include photographs of the exercise and participants. Consider using local art and culture to share the results. For example, develop a play or organise a storytelling hour where participants talk about the future.
- Distribute the results to participants and other community members. Post the results in a public place so that everyone can see and discuss them.

Box 38. Using visioning to prioritise development projects in Bolivia



Communities in Pando, Bolivia, used a voting method for determining which projects they would request in the annual municipal planning process. First, community members did the visioning exercise in small groups. Next, each group shared its vision. A note taker recorded aspects of the visions on a flipchart as they were presented. Then, each community member voted for the four aspects that were most important to him or her. The votes were totalled, and then the aspects with the most votes were identified. For instance, clean water, communication radio and a better school building were common ideas. Community members then detailed how they might be able to achieve these visions and how local government could play a part in assisting them. Related projects were then presented to the local government for approval.

Box 39. Visioning in the participatory planning process in Pando

The municipality of El Sena in Bolivia experimented with scenarios as community planning tools. First, 20 citizens and leaders from El Sena participated in a scenarios facilitator training seminar sponsored by CIFOR. Then, the newly trained facilitators travelled to all 15 communities in El Sena to give scenarios workshops. In each community, virtually every adult participated with interest.

During the workshops, participants first imagined an ideal future for the community individually, and then they drew or wrote out their visions and discussed them in a group. Finally, they voted to determine on the most important aspects of the vision. At the end of the workshops, each community had a list of three or four projects to present at local government budget meetings.

Following the workshops, community leaders gathered in the municipal capital and presented the results of the visioning exercises to each other first. The leaders discussed their communities' visions and then worked together to coordinate plans to maximise projects and services. For instance, if two neighbouring communities both wanted a health post, the leaders coordinated to request only one that could serve both communities, leaving resources available for water-well construction. Then, during the budget planning meeting with the mayor and the municipal council, community leaders presented their proposals and negotiated for their approval. Later, during the end of year budget review process, local leaders and community members returned to their visions to evaluate progress on achieving their goals.

Figure 21. Development visions of community members in El Sena.



Box 40. Tips and options

- First pick an example to demonstrate the steps to the entire group. Then divide the participants into breakout groups and assign one or two goals to each group to apply the *Pathways* steps.
- This exercise can be adapted to groups with more experience in planning and more technology available, but the concept remains the same: developing plans with detailed dates and responsibilities that can be monitored for follow through.
- Organise a community meeting to present the results. Ask the community to brainstorm on how they might use the results.
- Organise presentations where community members can share their results with local government and other communities. Invite external audiences such as regional government, environmental and development NGOs.
- Plan short workshops with local officials so that they understand the methods. Ask community members to help facilitate the workshops. Promote a discussion about how the methods can be used in the participatory planning process.
- Involve the local press. Provide them with written materials. Suggest that participants talk about the exercise on a radio programme.

Visioning can be repeated at a larger scale (e.g. at the regional level). In such a case, representatives of different communities or governmental sectors come together to share the visions produced earlier by their respective groups.

Then, they work together to produce a region-wide vision. This can help with coordinating planning at a larger scale.

Pathways

Once a community has identified the goals that they want to achieve through visioning, they can plan the actions that would help them achieve their goals or, in other words, build a pathway from the present to the future. Developing a pathway gives communities a planning structure to achieve their goals step-by-step. It results in written plans that define specific steps and responsibilities to reach a goal. The plans can be monitored to assess progress towards the shared vision.

Participants first reflect on the present situation and compare it with how they wish it to be in the future. Then they identify the specific steps needed to reach a future goal. Each step details the target date for completion and the person responsible for making it happen.

The method helps communities break larger problems down into smaller steps. This allows communities to identify what actions they can take themselves, and what

Box 41. Time and materials for pathways

- 3 hours for the workshop
- Flipchart, markers, masking tape.

Team and participants

- 2 facilitators
- 1 note taker (can be from the community)
- 15–25 adult participants.

steps might require assistance from local government. Community leaders are then better able to explain the needs of the community and justify requests for assistance. The method helps local government identify community commitments and make better use of local resources.

Pathways also improves ownership and accountability of community members to a plan. Because specific individuals are identified to be responsible for steps and meet the target dates for completing them, community members have valuable information for monitoring implementation of the plan.

Step 1. Discuss vision and analyse the present

Compare participants' vision of the ideal future with their current situation to identify what is different between the two.

Ask the participants to decide on three or four goals that they want to achieve, based on their vision. If the vision was long term, such as 20 years, it may be helpful to break the timeframe down into shorter periods, such as every 5 years. This will help establish more realistic goals and make it easier to think about how to achieve them.

Next, for each goal, ask participants to identify what they have to change about the present to achieve their desired goal:

- How is the present reality different from the future goal?
- What is missing from the present?
- What obstacles are keeping them from achieving their goal?

Have the participants analyse the skills, resources or opportunities they already have at their disposal in order to achieve their goal:

- Do they have the necessary talents or skills?
- Do they have resources or rights that they can leverage?

- Are there partnerships with other communities or institutions that can be developed?

Step 2. Develop strategies to reach the goals

For each obstacle, the participants create a strategy to solve the problem and achieve their goal. The strategy consists of deciding 'how, who and when' to solve the problem. Be as detailed as possible about dates and responsibilities. If the strategy is specific, it is easier for the community to monitor follow through (see Figure 22 for an example).

Have the participants work in breakout groups, with each group assigned to produce one strategy. If this is the first time that the participants have engaged in any type of group planning, they may be surprised to find that they can quickly arrive at concrete solutions and decisions.

Step 3. Discuss the strategies

Bring the breakout groups back together and have each present its strategy. Analyse and discuss together, allowing for adjustments. Suggest steps for monitoring progress on the strategies.

Discussion questions include:

- Are these strategies reasonable?
- What will be the biggest obstacles to or possible points of failure in the strategies?
- How can the strategies be improved?
- What outsiders have to be included in this process?
- How will you ensure that the people assigned to a task complete it?
- When will the progress of these strategies be evaluated? Who will be in charge of organising the evaluation?

- Would you be able to do this now without a facilitator?

Step 4. Implement and monitor

Create a basic monitoring plan to ensure that the strategies are implemented. The plan should include specific events for following up on the strategies, such as meetings with participants to gauge progress.

Now, put the strategies into action!

*Scenario-based planning
helps communities consider
possible future outcomes and
long-term impacts.*

Photo by Kristen Evans

Box 42. Example of pathways to complete community well.

Today	Strategy			Future
<p><i>What advantages or resources do we have that we can leverage?</i></p> <ul style="list-style-type: none"> • A partially finished water well • Manual labour • Skilled craftsmen • Wood <p><i>What are we lacking and what obstacles do we have to overcome in order to reach our goal?</i></p> <ul style="list-style-type: none"> • A water well that is full of sticks, toads and mud that dries up in the dry season • Well lining • Platform • Well cover • Materials: iron bars, bricks, bucket, rope, cement, pulley, sand • Transportation for the materials • Money: total of about 2500 Bolivianos, which equals a box and a half of Brazil nut harvest per family <ul style="list-style-type: none"> - 1375 Bolivianos for materials - 1000 Bolivianos to rent a truck from the city for the materials - 100 Bolivianos to rent a truck from a neighbouring community for the sand 	<p><i>What will we do?</i></p>	<p><i>Who will do it?</i></p>	<p><i>When will it be done?</i></p>	<p><i>...Goal accomplished!!</i></p>
	<p>First, request that the mayor help finish the well</p>	<p>A commission from the community</p>	<p>April</p>	<p><i>A water well that is finished, clean and always full of water</i></p>
	<p>Collect a box and a half of the Brazil nut harvest donated per family</p>	<p>Claudia, the community treasurer</p>	<p>March</p>	
	<p>Buy construction materials</p>	<p>The treasurer Claudia, the craftsman Guido and community leaders</p>	<p>The first days of April</p>	
	<p>Buy cement</p>	<p>Claudia and Guido</p>	<p>September</p>	
	<p>Dig the well deeper, clean it</p>	<p>Guido and community volunteers</p>	<p>September</p>	

Box 43. Tips for getting started

Scenario-based planning is participatory and powerful. However, it can be difficult to convince people of the effectiveness of scenario-based planning if they do not try it. So, the best way to share with local government officials and communities what scenario-based planning is and how it can help them is to show by doing!

- Organise a Scenarios workshop with local government officials and community leaders, where they participate in an actual Scenarios exercise. It should be a real planning session, not simply a hypothetical situation. During and after the exercise, discuss how scenarios can be used for participatory planning in the communities. Does the method need to be adapted? Can it be performed in all communities? Who could facilitate?
- Facilitate a Scenarios workshop in one community. After the workshop, organise presentations of the results by the participants so that they can share the results with other communities and explain the method.
- Plan a local facilitator training session in the Scenarios methods. Invite potential facilitators, such as local government officials, leaders of community organisations, and teachers. This will create a team of Scenarios facilitators who can run the workshops in all of the communities.

For more information on scenario-based planning, see:

- Evans, K., Velarde, S.J., Prieto, R.P., Rao, S.N., Sertzen, S., Davila, K., Cronkleton, P. and de Jong, W. 2006 Field guide to the future: Four ways for communities to think ahead. Alternatives to Slash and Burn Consortium, World Agroforestry Centre, Nairobi, Kenya and CIFOR, Bogor, Indonesia. (Available at: www.asb.cgiar.org/ma/scenarios)
- Nemarundwe, N., de Jong, W. and Cronkleton, P. 2003 Future scenarios as an instrument for forest management. CIFOR, Bogor, Indonesia.
- Peterson, G.D., Beard, T.D., Beisner, B.E., Bennett, E.M., Carpenter, S.R., Cumming, G.S., Dent, C.L. and Havlicek, T.D. 2003 Assessing future ecosystem services: a case study of the Northern Highlands Lake District, Wisconsin. Conservation Ecology 7(3): Article 1. (<http://www.ecologyandsociety.org/vol7/iss3/art1/print.pdf>)
- Wollenberg, E., Edmunds, D. and Buck, L. 2000 Anticipating change: Scenarios as a tool for adaptive forest management: A guide. CIFOR, Bogor, Indonesia.

Acknowledgements

In Bolivia, we would like to thank the citizens and officials of the municipality of El Sena who participated in this research project. They educated and informed us, and in turn were enthusiastic and willing partners in the activities, workshops, meetings and field work of the past several years. We are especially grateful to the Municipal Government of El Sena and mayor Napoleon Antelo for embracing this project and extending their resources to assist us in innumerable ways. In particular, we would like to thank the following members of the El Sena Government and residents: Walter Roca, Luís Lazo, Dionisio Huallas, Walter Huarena, Rodilid Salvatierra, Sonia Vidaurre, Mariano Justiniano, Hugo Zabala, Remberto Forero, Juan Lazo, Félix Patzi, Yasmani Zabala, Emilio Cambero, Moisés Tuno, Onofre Siviora, Jhonny Justiniano, Lady Laura Salvatierra and Florinda Vaca. Many other local organisations deserve our thanks, among them the Prefecture of Pando, the Association of Municipal Governments of Pando (AMDEPANDO), the Bolivian Forest Superintendence and the Fundación José Manuel Pando. Several students did individual research projects that contributed to our work: Jennifer Kleeb, Meike Steimann, Lígia Pereira and Claudia Oemer.

In Indonesia, we want to thank the people and local governments of Malinau and Kutai Barat, as well as more than 200 community assessors for the fruitful collaboration. The district government of Kutai Barat fully covered the costs

related to the wellbeing survey of 2006. In particular, we want to thank Rama A. Asia, Encik Mugnidin, Silas Sinan, Fredrick Ellia, Yuvinus Nyintih, Fincen Allotodang, Asrani, Subhan Noor, Sangga Sarira, Firdaus, Abimael, Elivianus, Edi Almudin, Erwin Dani, Eli Surario, Rudi Warjono, Jakaria, Darius Dalip, Kukuh Tugiyono, Doni Tiaka, Brigita Edna, Maria Goretti Dau, Berry Iranon, Harifuddin, Muksin, Supiansyah, Yohanes, Erwin Dani, Mikael Meksis, Yosep Darius, Wehang, Benyamin, Y. Njuk Hanyeq, Mikael Deng, David Erison, Rusandi, Mikael Muis, Y. Silam Ajang, Arlis, Markus, Hang Huvang, Junaidi, Wilhelmus, Yansen Toding Datu, Tusin, Arminsyah Sumardi, Ham Wilhelmus, Ruth Aktalia, Priyana, Rustam, Imanuel, Istanto, Gung Usat, Ami Paramban, Nanda Pratama, Rikardo, Ahmad, Yosep Suparno, Yance, Edy, Victor Yosafat, Nuryani, Waina, Brigita Edna, Cathrin Bullinger, Erna Rositah, Benyamin, Oding Affandi, Agus Andrianto and Bison.

We thank the participants of an international expert meeting at Maurach, Lake Constance (Germany) in May 2006, including Hans Aeppli, Borany Penh, Judith Schlehe, Brian Belcher, Thomas Sikor, Erlinda Montillo-Burton, Rosalie McConnell, John-Andrew McNeish, Everisto Mapedza, Marco Antonio Núñez del Prado Coll, Pablo Pacheco and Martin Tampe, for their insightful contributions to our common exploration of the decentralisation-forest-poverty link.

At the University of Freiburg, we thank Michel Becker and Stefan Seitz for the supervision of their students and

their invaluable guidance during the entire project. Carol Grossmann helped initiate the project at the very beginning.

At GTZ Indonesia, we thank Manfred Poppe and Bernhard May for the excellent cooperation, as well as the team of ProBangkit, in particular Roto Priyono.

Friedhelm Betke of CIM/BPS shared his innovative ideas on poverty with the project.

At CIFOR, we thank Rita Rahmawati, Dina Hubudin, Charlotte Soeria, Doris Capistrano, Sonya Dewi, Brian Belcher, Gideon Suharyanto, Atie Puntodewo and Christine Wulandari. We also thank consultant editor Guy Manners.

At BMZ/BEAF, we thank Stefan Krall, Michael Bosch and Iris Schubert.

Carol J. Pierce Colfer, Betsy Campbell and Borany Penh carefully reviewed earlier draft versions of the source book and provided most valuable comments and suggestions for improvement.

Final Remarks

Helping people escape poverty is one of the most important functions of local governments. Getting people involved in the decision making that affects their wellbeing is a necessary first step.

We know that it is not easy to change the way things are done at the local government level. It is a process that requires genuine commitment to reform, and it requires time. But we hope that the concepts and tools offered in this source book provide practical ideas and inspiration for getting the process started.



Photo by Kristen Evans

Governments in many countries are decentralising to give more control over decision making and budgets to local administrations. One expectation of this change is that local governments will more effectively and efficiently respond to the poorest citizens in their jurisdictions. Decentralisation is especially significant to forest communities, which have historically benefited little from government services and poverty reduction programmes because of their physical isolation and social marginalisation.

This Source Book was written for local governments and their partners who hope to respond to the needs of forest communities and improve the wellbeing of their people. It first discusses important concepts, such as decentralisation, wellbeing, poverty and the link

between forests and poverty. It then presents four participatory tools that local governments may find useful to involve forest communities in the planning, monitoring and evaluation of development and poverty alleviation programmes, namely: monitoring local poverty contexts through interactive mapping; monitoring household wellbeing through local indicators; community evaluation of local government programmes; and communicating communities' needs through scenario-based planning.

The Source Book is based on the findings of an action research project carried out in forest communities in Indonesia and Bolivia by the Center for International Forestry Research (CIFOR). Although developed and tested in just two countries, the concepts and tools apply to people and governments around the globe.