

By Kristen Evans, Sandra J. Velarde, Rocio P. Prieto, Sheila N. Rao, Sandra Sertzen, Karina Dávila, Peter Cronkleton and Wil de Jong



The Center for International Forestry Research (CIFOR) is a leading international forestry research organization established in 1993 in response to global concerns about the social, environmental, and economic consequences of forest loss and degradation. CIFOR is dedicated to developing policies and technologies for sustainable use and management of forests, and for enhancing the well-being of people in developing countries who rely on tropical forests for their livelihoods.

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Field Guide to the Future

Four Ways for Communities to Think Ahead

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We invite you to provide feedback to this field guide to asb@cgiar.org and visit http://www.asb.cgiar.org/ma/scenarios for more updates.

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Foreword

Today, communities living in tropical forest margins find themselves in the midst of myriad changes: social, political, economic and environmental forces are transforming their worlds quickly. These forces are complex and often interact in unpredictable ways and therefore are difficult to comprehend. Many of them emanate from processes way beyond the domains of the communities—for example, from global market adjustments, realignments in international politics, and generational shifts in the moorings of cultures, identities and values. Whether experienced locally as surging waves or faint reverberations, these forces of change provide the context for local planning and decision-making. In general, they also tend to shape, to a significant degree, the way communities allocate, use and manage resources, including land and forest.

Planning for the future in the midst of such change and uncertainty can be daunting. However, at this critical juncture, thinking ahead is both an important responsibility and an invaluable opportunity. Communities are making decisions now that will affect their resources, their livelihoods and well-being—and those of their children—for generations to come.

"Field Guide to the Future" is the latest in a series of books that explain methods to help communities think ahead and plan for change. In the preparation of this field guide, the authors collaborated with communities in many parts of the world, particularly in tropical

forest margins, and now share experiences, lessons learned and methods used by those communities, so that other communities can use them to prepare for the future.

The field guide is a collaborative effort between the Center for International Forestry Research (CIFOR), the ASB-Partnership for the Tropical Forest Margins, a system-wide program of the Consultative Group on International Agricultural Research (CGIAR), the World Agroforestry Centre (ICRAF) and the Secretariat of the Millennium Ecosystem Assessment (MA). The first book in the series, "Anticipating Change: Scenarios as a Tool for Adaptive Forest Management" provides a conceptual introduction to the methods for thinking about the future and explains their applications. The second, "Future Scenarios as an Instrument for Forest Management" describes how to train facilitators in the methods. This newest contribution, "Field Guide to the Future", is a practical, step-bystep manual for using scenario-based methods in communities. The guide has been written in straightforward language and organized as a teaching tool to facilitate the use of the methods without additional training.

Doris CAPISTRANO
Director, Forests and Governance Programme
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About this Field Guide

The purpose of this field guide is to make thinking about the future easy and empowering. It was written specifically for natural resource dependent communities and the people who work with them.

The field guide begins with a brief discussion about communities that depend on natural resources, thinking about the future and why it is important for communities to think ahead. Next, we briefly introduce four methods for thinking about the future, describing hypothetical situations where each might be applied. We provide a comparative matrix to make it easier to decide between methods in a given context. We then discuss concepts such as participation, mental maps, uncertainty and complexity.

In the second section "Getting Ready" we explain how to plan for an exercise in thinking ahead in a community, with suggestions for organizing an event, selecting participants and monitoring progress.

The third section "Facilitating the Methods Step by Step" delves into the details. We explain each method using the following structure:

Objectives: Explains what the organizers and participants can expect to accomplish.

Products: The tangible results of the method.

Time and Materials: States duration and material requirements of the activity.

Team and Participants: Suggests who should organize the activity and who should participate in it.

Steps: Each method is broken down into several steps. We include estimated timeframes to accomplish each step. Suggested questions to facilitate discussion are provided in italics.

Tips and Options: Additional ideas for applying the methods.

In "Putting it All Together" we provide suggestions for follow through after the exercises. The next sections provide facilitation tips and additional resources.

This is not a book of recipes, but rather a tool to inspire your creativity and provide you with new ideas for working with communities.

Feel free to make photocopies of this field guide and share it with colleagues and communities. Mark it up with notes, better it with your experiences, pass it around and make it your own.



Today, communities that are dependent on natural resources find themselves in the midst of myriad changes: social, political, economic and environmental forces are transforming their worlds quickly.

Notes on terminology:

In previous CIFOR books, all four methods for thinking about the future were collectively called "Scenarios" (Wollenberg et al. 2000, Nemarundwe et al. 2003). As our experience has grown, our thinking has changed. We have decided to limit the use of the term "Scenarios" to only one of the methods, that which we previously referred to as "Alternative Scenarios". We will no longer use the term "Scenarios" in reference to the other three methods. Instead, we have shortened the terms to the following: Visioning, Pathways and Projections. This nomenclature coincides with current literature and international reports such as "Ecosystems and Human Well Being" (Millennium Ecosystem Assessment 2005), the Intergovernmental Panel on Climate Change Third Assessment Report (McCarthy et al. 2001) and the Global Environmental Outlook–3 (UNEP 2002).

Throughout the field guide, we use the term "exercise" instead of "workshop". There are two reasons for this: first, the methods can be applied in a variety of settings in addition to workshops, including field environments, town squares, conferences, theaters, meetings, or classrooms. Second, the exercises should be a continual process of learning and thinking beyond scheduled activities or the confines of a workshop. Therefore, the term "workshop" was dropped in favor of the broader and more open term "exercise".

1. Introduction

Communities and Their Future

As pressure on natural resources mounts, change is coming swiftly to communities that depend directly on land, forest and water for their livelihoods and well-being. Understanding what is happening today is difficult enough; thinking about tomorrow can be overwhelming. Planning for the future in the midst of such change is not easy. Yet these communities, like all communities, are making decisions now that will affect their children for generations. At this critical time, thinking ahead is both an important responsibility and an invaluable opportunity.

Natural resource dependent communities

Natural resource dependent communities come in all settings: farming settlements, forest villages, peri-urban neighborhoods, fishing towns and many more. The setting influences the diversity of a community's members and other "stakeholders". Stakeholders are individuals or groups who have an interest in or influence on the community and its natural resources. Stakeholders may include—in addition to community members—smallholder farmers, local business owners, politicians, industry representatives, non-profit organi-

zations and policy makers at different levels. In some communities, members play multiple roles: a farmer might also be a business owner, or a policy maker might manage a non-governmental organization. Stakeholders share concerns about their natural resources, but they may have very different opinions about how to use and manage them sustainably.

Communities managing natural resources

The communities that depend directly on natural resources are often disadvantaged because of little formal education, poverty or isolation. As a result, their voices are often unheard and their concerns unaddressed in decision making and policy development that affect their natural resources. Government officials, private economic interests and other stakeholders often do not value or understand the perspectives of local people and are less likely to include them in decision making.

Improving community participation in natural resource management is important for several reasons. Natural resource dependent communities are particularly vulnerable to environmental change or degradation. When new roads encroach on forests, local villages

might struggle, transform or disappear completely. If water sources are contaminated or grow scarce, households cannot carry out daily activities such as cooking, cleaning and washing. Large-scale development investments, such as mines or dams, can threaten the very existence of communities. Communities should have the right to be able to protect their interests and livelihoods, and participate in the decisions that affect their natural resources and well-being.

Just as importantly, community participation in decision making promotes sustainable management. Politicians and businesses tend to focus on short-term benefits; communities have a much bigger stake in guaranteeing that natural resources are available for future generations. In fact, communities can be the most effective champions of sustainable management when given a voice in decision making (Colfer 2005).

There are other good reasons for community empowerment: participatory decision making minimizes conflict and maximizes equitable benefit-sharing (Ostrom et al. 1999). In fact, community participation does not have to be detrimental to other stakeholders; rather, including communities in decision making can create a win-win outcome where everyone benefits (Colfer and Byron 2001).

When communities are ignored...



make their living by crafting traditional clay pots from mud and clay from the marshlands. When drafting new regulations to preserve the marshlands, policy makers conducted community forums to consult local people. Communities, including the Batwa, voiced their concerns about the new policy proposal. However, input from the forums was not systematically included in the final drafts, or was omitted entirely when final decisions were made at the ministerial level. The new environmental policy decreed that marshland resources can be used for agricultural production only. Now, the Batwas can no longer access the raw materials for their pots, which were their only source of income. They have no farming tradition, and so are left with no option. Because the Batwas' livelihoods were not considered in the policy development, their well-being is now under threat (Rao, personal communication).

Making decisions for the future

In even the smallest village, making decisions about natural resource use and management is complicated. Natural resources are often common-pool, meaning that communities need to come to group decisions about how to manage them. However, individuals within a community will frequently differ in the way they want the resources to be used and managed, and power can affect outcomes more often than fairness can. Outside of the community, there may be other stakeholders, such as business owners, local authorities and large landholders, who want to influence how natural resources are used. Additionally, there are many factors beyond the control of a community that impact its natural resources, such as government policy reforms, changes in land titling, price fluctuations of forest or agricultural products, advances in agriculture, or new road construction.

Natural resource management occurs at different scales, adding to the complexity of thinking about the future. Processes operating at large scales, such as global climate processes or international environmental management agreements, generate visible impacts slowly. Processes acting at smaller scales, such as road building or local regulations, typically evolve at a faster rate. Processes at different scales interact with each other. For example, international trade agreements and food prices may directly impact land clearing and the choice of crops by farmers. The outcomes of these linkages and interactions across scales are often difficult to anticipate. This helps to explain why policies or actions that are introduced to address specific problems so often have unintended consequences.

Communities might not be able to control how all of these factors will affect them, but they can decide how to respond. By thinking systematically about the future, communities can identify opportunities created by change and at the same time limit any potential negative impacts. A well-planned method can facilitate collective thinking about the future and set a dialogue in motion that involves all stakeholders in a safe, open forum to voice their concerns and opinions.



When communities take control of their future...

In Peru, recent laws required that anyone harvesting and selling Brazil nuts obtain a Non-timber Forest Product Concession Contract. To obtain a concession, the Brazil nut collectors must develop and comply with a forest management plan, which regulates the harvest, collection and transport of Brazil nuts. In Madre de Dios, 335 families saw an opportunity in these new laws to take control of their future. They requested titles to their land so that they could obtain concessions. The families then grouped themselves into associations, according to the size of the concession plot sought. Now they sell Brazil nuts directly to exporters and are no longer dependent on the prices local brokers offer (Fondebosque 2004).



Easing disputes in the present by planning for the future

In the Ban Mae Khong-Kha, Mae Chaem watershed, Chiang Mai, Thailand, competition for water was escalating as urban and industrial expansion was increasing in the lowlands, and deforestation for high input mono-cropping practices went unchecked in the uplands. Upstream-downstream disputes intensified. Upstream (Pgakanyaw) and downstream (Khon Muang) indigenous communities, local authorities and researchers discussed together the future of the watershed for the first time using the Scenarios method. Scientists had been focusing solely on solving water use problems, but community members had a bigger vision.

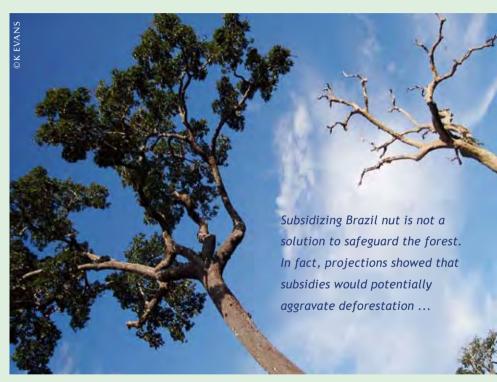
They recommended to the local authorities that the "holy forest" be set aside for conservation. As a result, tensions abated and local communities and administrators joined forces to plan for sustainable natural resource management (Thongbai et al. 2006).

Forecasting the future of water in southern Africa

In southern Africa, water is already scarce. Climate change is expected to exacerbate the problem with rainfall forecasted to decline by more than 50%. Population increases and economic growth will further stress the water supply (Alcamo et al. 2005). These projections suggest that water disputes in the region are likely to intensify and that governing authorities will come under increasing pressure to ensure fair and equitable water allocation. The likelihood of critical water shortages also poses serious questions about development plans that aim to promote economic growth and food security through irrigated agriculture (Scholes and Biggs 2004).

Modeling Brazil nut subsidies and incentives

In the past decade, settlers have moved to Brazil's western Acre state and put significant pressure on the Amazonian forests. Most settlers are clearing land for cattle pasture. However, half of farm families maintain part of their farm as forest in order to harvest Brazil nut. Some policy makers have suggested subsidizing Brazil nut to provide incentives to maintain more forest cover. ASB researchers used a specially developed bioeconomic model that explored the interactions of labor, capital, and land allocation over a 25-year period under various market and price scenarios. When they doubled the price of Brazil nut in the model, they found that the deforestation rate would not decrease. In fact, they projected that subsidies would potentially exacerbate deforestation because farmers would earn more cash from the Brazil nuts and then re-invest it by clearing forest for the more lucrative activity of cattle-raising (ASB 2003).



Two futures for Brazil nut in Bolivia.

Four Methods for Thinking Ahead

This field guide describes four methods for thinking ahead and preparing for the future. The methods challenge conventional wisdom about the future, stimulating discussion and action. Each approach encourages participants to engage in a mental exercise to address plausible future events or situations, clarify expectations, imagine potential outcomes and explore contingencies. The exercises are structured to promote creative dialogue and encourage collective participation in problem solving. When executed correctly, the methods encourage participants to discuss options, consider alternatives and reflect on chains of events to avoid the conflicts and costly mistakes that are likely without a well-defined, systematic method.

Each method for thinking about the future has a different approach and generates distinct results. The methods have been adapted from various sources, including the business environment, participatory rural assessment techniques and other community development sources. These methods were selected because they have proven to be effective, accessible and practical. They are both stand-alone and complementary; each technique has its own strengths that can be combined with the other methods.

The four methods are, briefly:

Scenarios are creative stories about the future, "plausible futures, each an example of what might happen under particular assumptions" (Millennium Ecosystem Assessment (MA) 2005). Participants develop realistic stories of possible outcomes based on the driving forces and uncertainties of today. The intention of Scenarios is to consider a variety of possible futures rather than to focus on the accurate prediction of a single outcome (van der Heijden 1996, Peterson et al. 2003a). Scenarios methods were originally developed by the Rand Institute for military war games (van der Heijden 1996), later adopted by Royal Dutch Shell for business strategy development (Wack 1985), and now are being applied in large scale environmental assessment such as the Millennium Ecosystem Assessment 2005 and in regional environmental impact prediction and planning (Peterson et al. 2003b).

Projections are forecasts of the future based on current trends. Projections are usually more analytical than creative, calculating a single expected outcome of a current trend or a range of statistical possibilities. Projections work best for short-term

forecasting, since, unlike Scenarios, they do not take into consideration uncertainties or unforeseen events. This method is also known as trend analysis and is used by economists and planners.

Visioning is a way for people to consider a single future—their ideal future—in depth. The purpose is to provide a way for people to articulate their hopes, share them and arrive at a consensus about a common vision for their community. Visioning might be a stand-alone exercise, or it may follow Scenarios.

Pathways help participants build a bridge from the present to a desired future by devising specific strategies and action steps. Pathways frequently are follow-up exercises to other methods for thinking about the future, such as Visioning or Scenarios. Visioning and Pathways are related to the Future Search methodology, created in the 1980s, which grew from a commitment to democratic ideals and a belief that local people should manage their own planning. The methods were adapted from business visioning and planning techniques approaches developed in Trist and Emery's Search Conference (Holman and Devane 1999).

When to use the methods

Below are a few hypothetical situations when the methods are helpful:

When people are using a natural resource in a new way and need to anticipate the impacts. For instance, market demand for natural rubber might be encouraging community members to cut down forest and plant new rubber plantations. Scenarios could provide a vehicle for participants to think about possible outcomes and the impacts on their community, such as increased incomes, price fluctuations, forest degradation and monoculture dependence. Projections can help estimate production levels or price fluctuations.

If people are managing natural resources unsustainably with disregard for future consequences. For example, escalating timber demand might be prompting a village to deforest its land rapidly. Projections will help the villagers understand the potential scale of the logging. Scenarios will explore the possible consequences of the deforestation for their families, their community and the environment in the long-term.

When a community is being affected by decisions made by others. For example, a small community in Mexico may anticipate significant impacts from North American Free Trade Agreement regulations, but may not be sure exactly what the impacts will be. Another example would be the construction of an upstream dam on a river that a community relies on for water. In both cases, Scenarios can help communities envision possible consequences and find ways to adjust.

When designing or initiating a development or conservation project. Any development project should involve community members early in the project design, to understand their aspirations and priorities. Visioning is a way for a community to develop its shared vision for the future and actively participate in project planning. Later, when the project is in motion, the community will take greater ownership if the project is based on their ideas.

When a community is heading toward potential problems, but is struggling to recognize them and respond. For instance, upstream deforestation might be affecting the water quality of a community's river. Scenarios can help the community understand possible health and environmental impacts that might result from the deforestation—and express these concerns to its upstream neighbors. Pathways can facilitate the development of realistic solutions to the problems and strategies for mitigation.

When there are conflicts over natural resource access rights.

For instance, a community might be hunting illegally in a neighboring national park. A Scenarios exercise with the park authorities and community members will provide participants with a better understanding of the reasons for the conflict and possible outcomes. Bringing together diverse stakeholders to think about their shared future is a powerful conflict resolution process. Solutions to the problem can then be developed using Pathways.

When a community is struggling to articulate its needs to local government. Decentralization processes in many countries are providing communities with new opportunities to participate in local government decision making. Visioning can help a community develop a single vision that represents the aspirations of its members. The community can then present this vision to local government and negotiate more effectively. The leaders of neighboring communities might meet for a shared Visioning exercise and then use the Pathways method to devise a regional development plan.

When distributing benefits from a natural resource management plan. Many management plans require that common-pool resource benefits be distributed communally. Visioning can help a community decide together on a common dream for the future. Pathways could then be used by participants to devise programs that can help the community reach its goals using the benefits from its management plan.

There are many other possible applications of these methods for thinking about the future. The methods can be combined depending on the desired impact and outputs.

The table on the right may be helpful in selecting the most appropriate option. The left column lists potential objectives for the exercise. The four methods are listed along the top row.

Objectives	Scenarios	Projections	Visioning	Pathways
1. Planning collaboratively			*	*
2. Understanding uncertainty and complexity	*			
3. Identifying possible future problems	*	*		
4. Envisioning a desired future			*	
5. Reaching consensus			*	*
6. Encouraging participation	*	*	*	*
7. Developing planning capacity	*			*
8. Conflict resolution	*		*	
9. Short-term thinking		*		
10. Long-term thinking	*		*	

Why the Methods are Useful

The methods that we present in this book are designed to empower communities to question conventional thinking, identify opportunities and threats, and make decisions.

Redrawing mental maps by asking "what if...?"

We all make decisions based upon our past experiences and assumptions about the future. These world views, or *mental maps*, arise from our upbringing, environment, culture, and political context. These mental maps, while useful for structuring our understanding of the world around us, often restrict us when we think about the future—limiting our ability to conceptualize the full range of possible outcomes. We may believe some events to be implausible simply because they have never occurred before or because they are undesirable or out of our control. So when "that could never happen" does indeed happen, we are surprised and caught off guard.

The methods in this book encourage participants to ask systematically and honestly: What if ...? Participants learn how to redraw mental maps, pushing the boundaries of conventional thinking. By doing so, they can gain unexpected insights into their assumptions and their limits of understanding. The results may be surprising or

uncomfortable, yet they are necessary in order to anticipate change. This richer perspective on possible future outcomes allows communities to prepare and plan more effectively for the future.

Capturing complexity, expecting surprises and understanding uncertainty

Traditional forecasting methods are appropriate for simple situations and short timeframes. However, as complexity and timeframes amplify, the power of prediction diminishes. When the situation is more complex, such as the interaction of a community with its environment, understanding can be limited, and unexpected outcomes are inevitable.

Trying to anticipate surprises may seem logically impossible. However, the approaches in this field guide make it possible to explore future outcomes and test surprises. The four methods for thinking ahead and planning for the future evolved in response to the challenge of thinking about highly uncertain futures in an organized manner. The techniques identify points of uncertainty and turn these uncertainties into vehicles to stimulate creative thinking.



Acacia trees planted on hillside in Vietnam.

Environmental surprises

Interruptions, breakdowns and surprising changes in ecosystems have occurred throughout human history. Many of these surprises resulted from well-intentioned human decisions. Actions with short-term benefits can have unanticipated negative side effects in the long-term. For example, in the early 20th century, irrigation increased agricultural productivity significantly in many parts of Australia. However, groundwater, unlike rainwater, has salt. As the salinity of the soil grew, productivity fell and much of the farmland became barren (Zurek, personal communication).

Harvesting acacias in Vietnam

Thuong Nhat, a community in the central provinces of Vietnam, was planting acacia trees to reforest eroding hillsides. The community expected to be able to harvest the trees for profit within twenty years. However, many factors may influence that outcome: a possible over-supply of the trees because so many communities were planting acacia at the same time, market fluctuations, changes in government harvest regulations, the construction of infrastructure to process the wood material, or land rights changes. By considering each one of these uncertainties and the relationships between them, the community was able to understand the array of possible future outcomes and make better decisions (Evans 2006).

Encouraging participation

Community members may have little experience with systematic methods for thinking about the future and planning. They may feel that their opinions are not really valued or that they are only being asked to participate as a token gesture. As a result, participants, particularly the most marginalized, may initially be hesitant about participatory exercises. However, the methods described in this book are designed to encourage everyone to get involved, contribute ideas and opinions, and work together to create the final product. Many of the steps are small group activities or use drawings, individual voting, and games that are active and physical. Varying the activities and roles provides more opportunities for participation.

Learning organizational and planning skills

In addition to the methods, participants learn new skills from the activities, such as facilitating discussion in groups, arriving at consensus, and formulating plans. Presenting and sharing results also provides valuable training in communication and negotiation skills, and boosts confidence for making presentations in a formal setting. Participants learn to be more vocal, prepared, and assertive. Many communities have noted an improvement in their negotiations with other stakeholders as a result of their experience with the methods presented in this field guide.

Potential outcomes

There are many different impacts and results of exploring these methods. These include:

- 1. The Scenarios, Projections, Visions, or Pathways generated by the activities are tangible results in the form of narratives, maps, models, drawings, plans and projections.
- Participants learn from the activities. Participants understand gaps in their own knowledge, reflect on their community and natural resources, identify linkages of cause and effect, and learn how to use the methods on their own.
- 3. Stakeholder groups learn too. Groups learn from each other by hearing the opinions and perspectives of others, and working together.
- 4. The greater community learns. The lessons learned from thinking about the future extend to the entire community and all stakeholders through an effective dissemination and communications plan.
- Policies change. Changing mental maps can influence policy. Therefore it is critical that decision makers and policy designers at all levels are included in the process and in the dissemination of the results.

Scenarios: uncharted waters ahead

This article (Wack 1985) is one of the cornerstones of the scenarios methodology; its publication initiated the adoption of scenarios work in corporations of all sizes, the public sector, community development and conservation. The author was the key architect of the scenarios methodology at Royal Dutch Shell. He also successfully orchestrated the integration of scenarios thinking into the Shell management culture.

The author sets the context for the adoption of scenarios thinking in Shell. In the 1970s, traditional forecasting in the energy industry had become less efficient. The expectations for steady growth and predictable change that had grown out of the post-war business environment were coming up against a number of disturbing events that threatened conventional thinking. Forecasting was failing: "This is like forecasting partly cloudy and getting a ten-inch snowstorm instead. After all, in economics as in meteorology, it's the ability to predict stormy change that makes forecasting useful".

The traditional business environment was changing. Uncertainty was the only certainty on the horizon. And Shell's forecasting and strategic planning methodologies were unable to confront and embrace uncertainty. "Uncertainty today is not just an occasional, temporary deviation from a reasonable predictability; it is a basic structural feature of the business environment".

Wack and his colleagues began scenarios planning to adapt corporate strategy to meet the challenges of the 1970s oil and gas market.

They quickly found that developing scenarios involved not just producing good alternative futures, but changing the way people at Shell thought.

The article explores the process of adopting the scenarios methodology and integrating it into the corporate culture at Shell. Wack makes a number of key points, among them:

- We all work within a worldview, a "mental map" of accepted understandings about the world. Scenarios thinking seeks to change this map to adapt to future possibilities.
- The first iteration of scenarios is often not detailed or sophisticated enough to be helpful for decision making. But it is a necessary step to reach the more nuanced and sophisticated subsequent round of scenarios.
- "Soft" data (impressions, intuitions, cultural understandings, experiences) can be as useful as "hard" data in analyzing outcomes and developing scenarios.
- The scenarios need to be communicated to partners and other actors (suppliers, customers, governments, etc.) in order to transform the "mental maps" of all stakeholders.

Only when the 1970s oil embargo began did Shell appreciate the power of scenarios, when business-as-usual planning became a liability. Because of scenarios, Shell was prepared for the unexpected and was able to respond to the changes brought about by the oil embargo more efficiently than any other oil company.

Participation

What is participation?

Participation is a continuous process of negotiation and decision making that occurs at various levels, and with all of the groups who are affected by the decisions (Jennings 2000). In practical terms, this means:

- Consulting different people who have an interest in, or a relationship to, an issue. Consulting means discussing opportunities and problems openly in an environment of respect and collaboration where people can exchange diverse points of view and experiences. External contributions from experts are welcomed, particularly in areas such as policy, law and science.
- Exploring the interrelations between groups of different decision making levels. This requires honestly examining and acknowledging power inequalities and influential players.
- Communicating and disseminating results and decisions to all groups. The results should be presented in meaningful ways that can be understood by everyone.

Who participates?

The people who have an interest in, or a relationship to, an issue are often called "stakeholders". Stakeholders can be divided into two general categories, "insiders" and "outsiders". Insiders come from within the immediate physical setting or context of the issue or problem. Insiders are usually directly affected by decisions. Outsiders have influence on decision making or are affected indirectly by decisions. These categories depend on the context. For instance, a local government official may be an outsider to a community problem, but an insider to a regional issue. Figure 1 shows an example of insiders and outsiders to a community-specific issue. Distance from the center demonstrates the degree to which an issue impacts the stakeholder.

All stakeholder groups should be represented in a participatory exercise. This is easy in a small village where every person can fit into one room. However, when the community is larger or members are dispersed, the process of selecting who participates becomes more complicated. Bigger audiences do not ensure the success of participation and using participatory methods does not mean inviting everyone. Coordinators have a tendency to try to draw as big a group as possible to their events. It can be a better idea to invite representatives of each group.

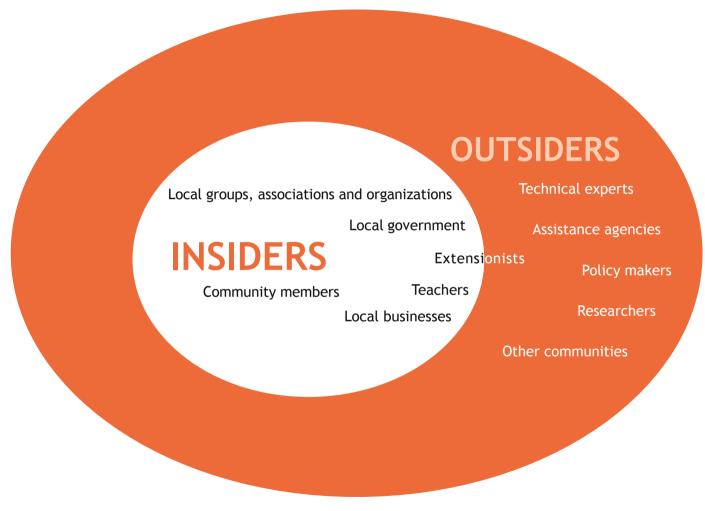


Figure 1. Insiders and outsiders to a hypothetical community issue.

2. Getting Ready

Team Preparations

This section provides guidelines and suggestions for planning an exercise. Remember that careful preparation is the key to the success of any participatory exercise, particularly when the method is being used for the first time.

Objectives

- Planning the exercise
- Define roles and responsibilities within the core team

Products

- Clearly stated goals for the exercise
- Action plan
- Budget
- Logistics checklist
- Monitoring strategy
- Detailed agenda
- List of stakeholders and participants
- Assessment of available data and technical capabilities
- Draft dissemination and follow up strategies

Time and materials

- Allow 6-7 days, including at least 5 days for preparation and 1 day of planning immediately before the exercise. The total time will depend on the availability and location of the core team members. Planning should start at least one month prior to the exercise depending on the local lead-time customs for invitations.
- Ensure open communication channels (internet, phone, fax) and facilities for face-to-face meetings.

Steps

Step 1: Organize the core team - 2 days

Organizing and facilitating an exercise takes a lot of work and is most successful when it is a group effort. Therefore, the important first step when preparing for an exercise is creating a *core team* of committed people, each assigned particular responsibilities. The core team should include a *coordinator* who provides leadership and facilitates the smooth running of the whole exercise.



It is important to define the goals of the exercise with participants and return to them frequently during the activities to review progress.

The **content leader** makes sure that the content is relevant to the participants and that the presenters are meeting expectations. The *logistics planner* is in charge of running the practical details of the exercise, such as materials, venue, food etc. The facilitator(s) leads the activities, motivates participation and moderates discussion. The **note taker** documents the exercise and can also serve as the monitoring coordinator who is in charge of the monitoring and evaluation activities. At least two members of the community should be included in the core team, if possible. If resources or practical considerations do not permit a large team, consider these roles as responsibilities that can be shared between members of a smaller core team.

Invite enthusiastic and creative people to join the core team!

Things to do:

- Explain the expectations of the core team.
- Confirm their willingness to participate and availability of their time.
- Provide the group with background material on methods for thinking about the future, such as copies of this guide, articles and case studies.

From this point forward, the entire core team should be fully involved in planning the exercise.

Step 2: Define clear goals for the exercise - 2-4 hours

Here the core team brainstorms and writes down one or more goals for the exercise. Each goal should be "SMART", which stands for:

- Specific
- Measurable
- Achievable
- Realistic
- Time-bound

Clearly defined goals will provide guidance in all aspects of planning, from selecting appropriate methods to deciding whom to invite to the exercise. Formulate the goals carefully; the success of the exercise depends on it. Participants can refine the goals later.

Step 3: Develop the action plan and budget - 1 day

The action plan outlines the general scope of the exercise: calendar of events, number of participants, responsibilities of core team members, and the budget for the exercise.

The action plan should include the following:

 Issues that could affect logistics. For example, is the exchange rate stable? Is the activity planned for the rainy season, possibly affecting transportation? Is electricity available and reliable?
 Would participants need financial compensation for travel to the exercise?

- Issues that could affect participation: Is it during a season when participants frequently get sick and cannot attend? Are there any rallies, parties or events that may occur at the same time? Consider the daily routine and activities of the participants. Try to organize the exercise during periods when most participants can attend. For example, avoid market days or harvest time. Because of family commitments, it is often difficult for women to attend full-day events. Consider breaking the activities down into half-day segments.
- Based on the activity schedule, assign roles and responsibilities for the core team.
- Create a logistics checklist (see Annex 1 on page 78 for an example).

Once the action plan is complete, it is possible to budget for the exercise (see Annex 2 on page 81 for a sample budget). When preparing the budget, consider the following:

- Registration costs
- Travel and/or local transport
- Accommodation
- Refreshments
- Event location
- Materials
- Dissemination and follow up activities
- Administrative Costs (10% to 30%)
- Contingency (2.5-5%)



Selection of participants

In Puerto Maldonado, Peru, a multi-stakeholder Scenarios exercise was being held to analyze the impacts of a new highway being paved from Brazil to Peru. Soon after the core team completed the preliminary planning, vandals burned several environmental NGOs and government offices. Since the situation had become highly charged, the core team steered clear of additional potential conflict by changing the participant group to a more neutral one — higher education students. The issues were still discussed publicly, but in a safer, less confrontational context (Prieto, personal communication).

Step 4: Define stakeholders and select participants – 2-4 hours The next step is to identify stakeholders who might want to participate in the exercise. See "Selection of Participants" on page 24, for detailed steps on defining stakeholders and selecting participants.

The suggested number of participants for the exercises is 15-25. Breakout groups ideally have 5 or 6 participants.

Step 5: Designate the facilitator - 2 hours

Select a facilitator who is dynamic, engaging, open-minded and flexible. S/he must be able to draw out diverse opinions during discussions and summarize important points, without being dominating. Most importantly the facilitator must be skilled at communicating with people in their own language and manner (see "Facilitation Skills and Tips" on page 70). Good places to look for facilitators are universities or local institutions that have training programs.

School teachers can be excellent facilitators with rural communities because they understand the local context. It may be a good idea to hire a professional facilitator, particularly if the participants are a diverse group with strong opinions, or if the topic is controversial. Consider assigning an assistant facilitator to help out — facilitating is tiring work! Once selected, the facilitator must be included in the core team planning.

Step 6: Identify available data and assess technical capabilities

- 2 hours

Assess available data related to the exercise topic. What information should be brought into the discussions? Are there maps, survey results, plans, satellite photos, studies or historical accounts that are relevant to the exercise topic? Can the data be incorporated into a model? Are there local experts who can present the data during the exercise, do they have expertise in modeling or mapping?



A facilitator should be dynamic, engaging, open-minded, flexible, able to draw out diverse opinions during discussions and summarize important points, without being dominating.

Step 7: Design the monitoring strategy – 2-4 hours

Monitoring progress during the exercise allows the core team to adapt and improve. Monitoring change after the exercise checks that the methods are fulfilling the goals of the exercise. See the section on Monitoring (page 30) for more details on developing a monitoring strategy.

Step 8: Develop the agenda - 2-4 hours

The agenda is a detailed plan of activities. A suggested format for developing the agenda is shown on the next page (see the Annex 3 page 83 for a complete example).

Be sure to include the following:

- Energizers and icebreakers
- Tea and lunch breaks these are important breakthrough moments, when participants have a chance to talk informally about ideas brought up during the activities
- A discussion on dissemination and follow up activities with the participants
- Monitoring activities (see page 30) for more details

Format for developing the Agenda

Step	Objective	Time	Leader	Methods	Tools and Materials	Unexpected issues	Cost

Step 9: Draft the preliminary dissemination plan $-\frac{1}{2}$ day

Brainstorm with the core team on key audiences and the best way to reach them. Draft dissemination and follow up strategies for each of those audiences. The plan is preliminary at this stage; be sure to set aside time during the exercise for participants to provide input too. An example of a dissemination plan is shown on the next page.

Step 10: Final meeting before the exercise -2-4 hours

A few days before the exercise, the core team should go over the action plan and agenda for any last minute adjustments, review the logistics checklist and rehearse the opening activities. Do not panic if some details are missing — work as a group to solve them while there is still time. Remember, in any exercise, things do not always go as planned. Be prepared to improvise!

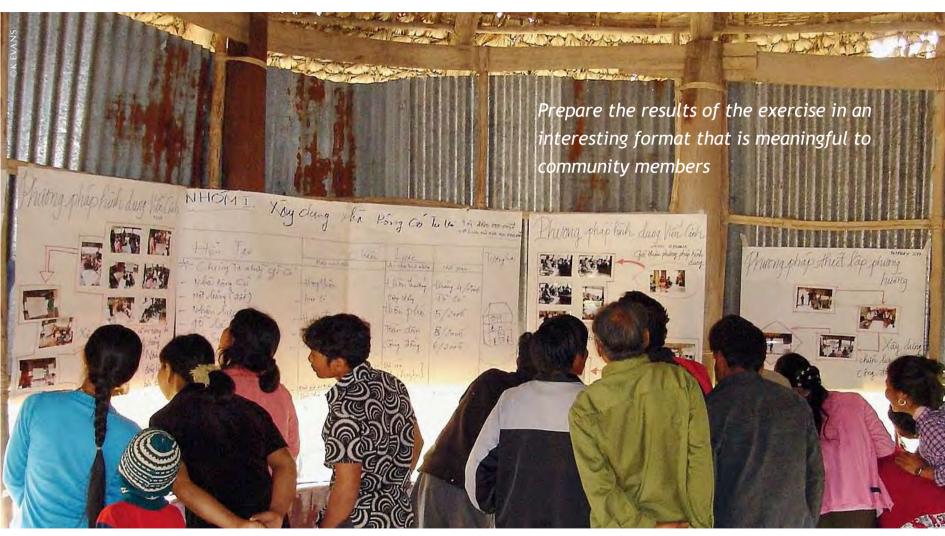


Visual and interesting posters do not have to be expensive. Experiment with the materials available.

Example* of a dissemination plan

Goal	Target audience	Action	Leader	Deadline	Resources needed (people, venue, materials, budget)
Disseminate results with participants and their communities	Participants and local communities	Distribute results report Present results on local radio program	Note taker	15th Oct. 2006	+Core team (notes) +Participant list +US\$2/ copy +Contacts with local radio
Raise awareness of the importance of forward planning	Local authorities	Meeting to share scenarios and their relevance	Coordinator	15th Nov. 2006	+Core team +Refreshments

^{*} This example only shows part of the dissemination plan.



An effective way to return results to a community is to combine posters with photographs and present them at a community event. Here, community members in the village of Thuong Nyat in Vietnam review the results of a Scenarios exercise and share them with local government officials.

Selection of Participants

Selecting the participants for an exercise is a sensitive process; it should be an open and transparent consultation of all interested groups. This will help ensure a fair representation of stakeholders and encourage local support for the activity.

The selection process has two steps. First, identify and analyse the stakeholder groups that have an interest in the topic of the exercise and/or who could be affected by its outcome. Second, select a target group of representatives from the stakeholder groups to participate in the exercise. This is a good way to increase the quality of reflection and discussion. Each member of the target group then has the responsibility to disseminate results and consult with the people that he or she represents.

Objectives

- To identify stakeholders and their respective roles
- To draw out the interests of stakeholders in relation to the issue being addressed and to define why they are participating in the exercise
- To identify the relationships that exist between stakeholders, and explore how they can be developed
- To identify conflicts of interest

Products

- A description of stakeholders and their influence, importance and relationships
- A list of individuals to invite to the exercise

Time and materials

- 2-4 hours
- Flipchart, markers, cardstock, masking tape

Team and participants

- Core team
- Members of the community

Step 1: Stakeholder identification and analysis (adapted from Taylor and Beniest 2003 and 2006)

- 1. List the topics to be addressed in the exercise.
- 2. List the stakeholders who have an interest or impact on the topics. Be specific, for example say "provincial natural resource department" or "head of the village" instead of "government" or "managers", respectively.
- 3. Group stakeholders into "insiders" and "outsiders" (see "Participation" on page 14 for more explanation). Group stakeholders according to criteria such as "young and old", "male and female" or any other classification that might be meaningful to the exercise.
- 4. Identify each stakeholder group's interests in the exercise.
- 5. Highlight positive relationships between stakeholders that could lead to constructive processes or outcomes, such as through complementary activities, inputs or collaborations.
- 6. Analyze the relationships between different stakeholders, according to their relative importance and influence.
- 7. Note any conflicting interests among groups. It is important to recognize these in advance and put necessary conflict management strategies in place.
- 8. Draft a stakeholder participation matrix. Assign possible roles and responsibilities to each stakeholder group. For instance, the local forestry department might be responsible for bringing land use maps to the exercise, or the community leader might be asked to motivate community participation.

There are several participatory activities for analyzing stakeholders. We provide two here:

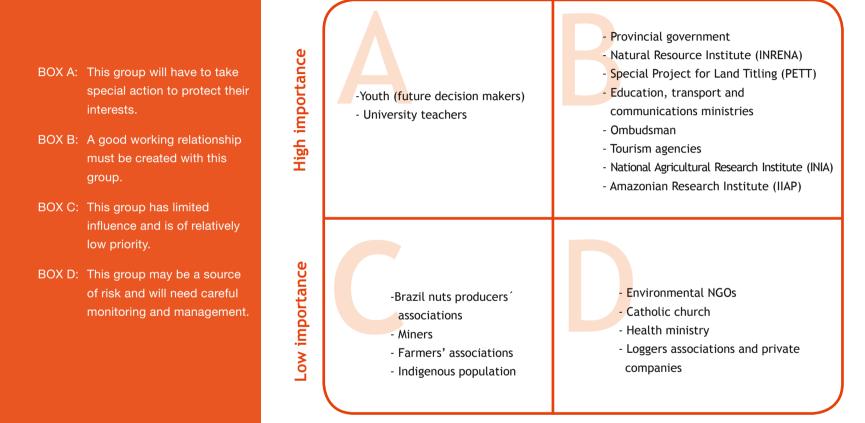
The first, the *Importance and influence matrix*, is useful when participants are familiar with abstractions such as graphs or diagrams.

The second, the Venn diagram, is visual and easier to understand.

For both methods, it is a good idea to have two groups complete the exercise separately and then compare the results. In addition to the completed stakeholder analysis, the other important benefit of this activity is that important issues are brought up during discussion.

Option 1: Importance and influence matrix

Draw the matrix on a large flipchart (see Figure 2, page 26). Write the name of each stakeholder on a separate card and stick the cards in the appropriate boxes in the matrix, according to the relative importance and influence of each group. Then review and discuss. The group may decide to move some of the cards around until they reach a consensus. Then read the definitions below about the relevance of each box.



Low influence

Figure 2. Importance and influence matrix. The objective of the exercise "Exploring the future" developed in Madre de Dios, Peru, was to understand university students' perceptions about the impact of the transoceanic road that was being built close to where they live (Prieto et al. 2006).

High influence

Option 2: Venn diagram

This is an adaptation of the popular participatory rural assessment activity. On flipchart paper, write the title of the exercise, such as "Vision for the Village," or "Scenarios". Cut three sizes of circles from two colors of cardstock. Select one color for "insiders" and another for "outsiders."

Refer to the list of stakeholders identified earlier. For each "outsider", decide how important his or her involvement should be and select the corresponding circle:

- Little importance = smallest circle
- Some importance = middle sized circle
- Very important = largest circle

Write the name of the stakeholder in the appropriate sized circle. Repeat for all "outsiders." Then change to the "insider" color for the circles and follow the same procedure for all the insiders. When every stakeholder's name has been written on a circle, organize and affix all the circles onto the flipchart, grouping the circles according to relationships between them: the closer the relationship between two stakeholders, the closer the circles with their names should be placed on the flipchart (see Figure 3, page 28).

Now cut three sizes of triangles from a different color of cardstock. For each stakeholder, choose a small, medium or large triangle depending on the degree of influence that stakeholder has on the exercise. Stick the triangle on the edge of the stakeholder circle. A stakeholder awarded a small "importance" circle could receive a large "influence" triangle and vice versa. Once the diagram is complete, review it as a group and discuss the relative importance and influence of each stakeholder until a consensus is reached.

The example of a Venn diagram on the next page demonstrates a hypothetical situation where an indigenous community with a forest management plan wants to project the long-term viability of legal commercial forestry in the region. Green circles signify insiders, and red circles are outsiders. The extent of the overlap of circles represents the extent of the relationship between stakeholders. The size of the circles signifies the importance of the stakeholders in the exercise. The size of the triangles represents stakeholders' influence on the issue.

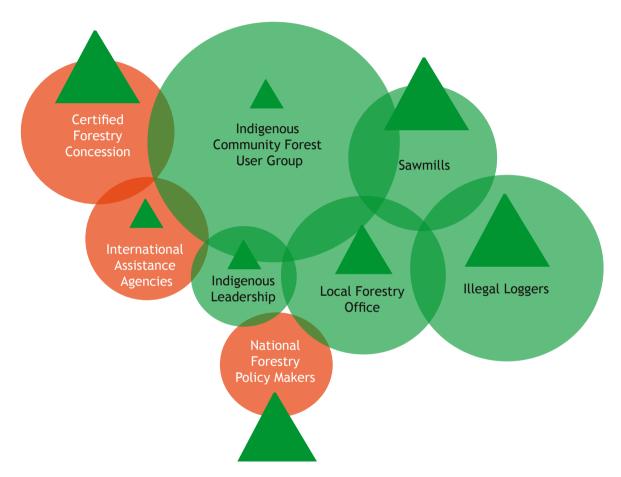


Figure 3. Example of a Venn diagram for an hypothetical situation where an indigenous community with a forest management plan wants to project the long-term viability of legal commercial forestry in the region.

Step 2: Selecting participants

Once the core team has identified stakeholders, they need to select individuals to invite from each stakeholder group. It is helpful to return to the goals of the exercise and reflect on the skills or perspectives that will contribute to the goals. One benefit of these methods is that they create an understanding of differences of opinion; do not be afraid to invite people who disagree.

Important note:

It is easy to invite "all the usual suspects" such as the community leader or the women's club president. These invitees are often serial participants who actually spend less time in their community than they do in meetings. They also frequently dominate discussion. One solution is to require that leaders bring one person along who has never attended a similar exercise. The best results can come when new voices are permitted to speak.

The core team should be flexible and adapt to local custom when planning the selection and invitation process, such as involving traditional leaders or having the local government make the invitations. In some rural areas, a preliminary selection process simply is not feasible because of difficulties of communication and travel.

Selecting participants for a facilitator training course

CIFOR developed a facilitator training event in Buena Vista, Bolivia to introduce community forestry professionals to methods for thinking about the future. Although many people wanted to participate in the event, organizers knew that the training would be better if they could target it. They required that participants have specific qualifications:

- Professionals working with local level forest user groups and communities
- People with practical field experience
- People who are motivated to facilitate resource management decision making at the local level

(Nemarundwe et al. 2003)

The last minute culture

Invitations and sign-up forms for the exercise "Exploring the Future" in Madre de Dios, Peru were distributed to several higher education institutions one month in advance, with a deadline to respond one week prior to the event. However, most of the participants heard about the exercise the day it was scheduled to begin, and so registration forms were accepted up until the last minute (Prieto et al. 2006).

Monitoring

Monitoring is a continuous process of evaluation that gauges the progress and impact of the exercise. The data that is monitored is called an indicator. An indicator is specific, measurable information about the exercise that provides a sense of larger trends.

There are several aspects of the exercise that can be monitored:

Progress of the exercise. Monitoring can determine if participants are comfortable with the methods, if they are learning, and if they feel free to express their points of view. For instance, do the participants understand the concepts introduced in the sessions? Is the environment conducive to open discussion? Are people participating? Are the daily goals of the exercise being met?

Impact of the exercise. Monitoring can track whether there is any larger response or impact as a result of the exercise and if the activity is achieving its larger goals. For instance, are new management strategies being considered by decision makers? Are local policies changing as a result of the exercise? What is the impact on local livelihoods and well-being?

Monitoring should not be complicated or burdensome. Choose indicators that are easy to measure. For each indicator, examine causal links and other factors involved in the change: Is the indicator a reliable measure of change?

Objectives

- To analyze and discuss the value of monitoring
- To develop a monitoring plan
- To track and evaluate the progress of the exercise and impacts afterwards

Products

- Monitoring plan
- Evaluations

Time and materials

- Variable
- Flipchart, markers, cardstock, masking tape

key

elements

Team and participants

- Core team
- Participants
- Wider community

Step 1: Design the monitoring plan - 2 hours

First, designate a core team member to be Monitoring Coordinator. Then the core team should review the goals of the exercise. For each goal, create a simple monitoring plan:

What indicators should be monitored? Identify indicators that can show that change is occurring.

Who should be involved in the monitoring? Involve participants and other stakeholders, but ensure that you don't overburden them with responsibilities.

When should the monitoring be carried out? Monitoring should be carried out systematically, at regular intervals. For instance, participant learning might be monitored at the end of every day of the exercise. Monitoring overall impacts of the exercise can occur every month or year.

How should the monitoring be carried out? Monitoring activities may include participatory methods, scientific samples, surveys or interviews with experts. Try to keep the monitoring activities simple and interesting.

How will the monitoring results be used? The results need to feed back into decision making. Be sure to allocate time for the core team to review monitoring results every day. To monitor impacts after the exercise, plan regular events, such as annual forums or regular publications where the monitoring results are presented to participants and other decision makers.



Community members use Brazil nuts to vote on whether the objectives of an exercise have been met.

Step 2: Monitor during the exercise

Monitor participant learning and the progress by creating "safe spaces", where participants feel free to express their opinions.

Suggested activities:

Pause and ask - 20 minutes

From time to time during the exercise, pause to make sure that participants understand proceedings. Normally their expressions or comments will tell you! Or ask them to respond on note cards:

At this point, what is your biggest question about the exercise? How do you feel about the objective of the exercise? Are we close to accomplishing it?

What are you learning from this exercise?

Collect the cards and then group them by topic during a break. After the break, address the issues and questions that can be answered, and set aside others for later discussion.

Mood-o-meter - 20 minutes

This monitoring tool is very simple. On a large piece of paper, draw a diagram like the one in Figure 4.

"My feeling of the exercise at the moment is..."

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Figure 4. Mood-o-meter.

The participants draw an X under the figure that best represents their feelings. This method gives a very visual impression of the participants' emotional reactions during the exercise or at the end of it. The results, particularly if they are extremely negative, should be discussed to bring up suggestions for improvement.

Written comments – 20 minutes

Visual tools like the mood-o-meter are very useful and quick.

However, they provide a limited amount of information. One simple way to invite participants to express their opinions—anonymously, if they prefer—is to distribute cards and ask them to write positive and constructive comments, such as:

Positive comments:

"This is what I liked the most:"

"The most important thing I learned is:"

"This is what I will apply when I go back home:"

Constructive criticism:

"This is what I liked least:"

"Next time you should change:"

"This was not useful:"

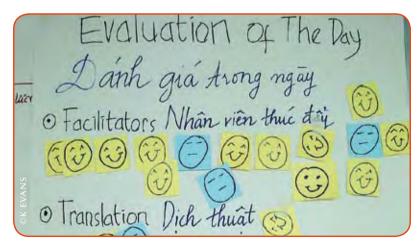
After writing on the cards, participants place them in a box. One person then opens the box and tapes all cards on the wall. Next, the facilitator or a small group of participants classifies the cards according to key themes. This tool can be used at the end of every day, so that the core team can review feedback and adjust activities for the following day.

A variant is to have participants write their "Hopes" and "Concerns" on cards, at the beginning of the exercise. Put them up and revisit them from time to time during the exercise.

If literacy skills are low, break participants into small groups and assign a note taker for each group. Have each group quickly brainstorm their comments or criticisms.



Examples of "Hopes" and "concerns", ASB Global Scenarios Training Course, Chiang Mai, Thailand, November 2004 (Rao and Velarde 2005).



Smiley faces provide an easy way for non-literate participants to provide feedback, as they have during this exercise in Vietnam.

Pair-wise evaluation - 1 hour

One or two participants act as "interviewers" and talk informally with other participants, determining what went well and what did not during the day. They report back to the group the next morning. The interviewers can be two volunteers or can be designated by the facilitator. This tool also works well when the stakeholders speak multiple languages or when not everyone is fully comfortable in the primary language of the exercise.

Daily review - 30 minutes-1 hour

The core team, and at least one of the participants, should meet at the end of each day to discuss what went well and what needs improvement.

Pair-wise evaluation results for the first day of the ASB Global Scenarios Training Course



Participants sharing the pair-wise evaluation results for the first day of the ASB Global Scenarios Training Course in Chiang Mai, Thailand. November 2004.

Chiang Mai, Thailand, November 2004

- · The most interesting sessions were the "introduction of participants" and "introduction to Scenarios." The one about small grants projects was not very interesting.
- The room layout may be okay for discussion groups but not for plenary presentations. Some participants are at odd angles with respect to the facilitators.
- Several facilitators speak too fast for most participants to follow.
- There is insufficient time for reflection and discussion.
- Organize a group sport event early in the morning. (Rao and Velarde 2005).

Step 3: Evaluate at the end of the exercise – 1 hour

Participant evaluations:

At the end of the exercise, evaluate the extent to which the overall goals of the exercise have been achieved. There are many possible activities, such as small group discussions, questionnaires, round robin interviews and objective evaluations. See the Final Evaluation Form in the Annex (page 85).

Another way of assessing if the goals of the exercise were achieved is by asking indirect questions to the group. For example, in Puerto Maldonado, Peru, the objective of the exercise was to raise awareness about the effects of road building. An indirect question to assess the participants' awareness was: What did you learn from others about the potential impacts of this new road in your town?

Final evaluation by the core team:

Following the exercise, the core team should meet to review and critique the exercise. Discuss the high points of the exercise and also the problems. Review the results of the participant evaluations. Develop a list of improvements and recommendations for the next event.

Step 4: Monitor impact after the exercise - Variable

What impact did the exercise have? Only by tracking systematically how things are changing is it possible to make any valid conclusions. Follow through with the monitoring plan to evaluate whether the goals of the exercise are being achieved and to identify other impacts of the exercise. Organize a regular monitoring schedule, and follow up with presentations and publications of the results to stakeholders.

3. Facilitating the Methods Step by Step

This section provides step by step instruction on how to facilitate the methods. Use one or more of the methods or blend them. Feel free to experiment and adapt. Then follow through after the exercises by "Putting It All Together" (see page 68).

Starting Up

The nametags are ready, the tea and coffee is hot and the participants have arrived. Time to begin! This session sets the tone for the rest of the exercise, so start out right—with energy and enthusiasm.

Objectives

- To introduce everyone and break the ice
- To discuss and revise the goals of the exercise
- To start thinking about the future

Products

- Goals of the exercise agreed upon by the participants
- List of expectations for the exercise
- Meeting rules
- Definition of participant roles

Time and materials

• 3-4 hours

elements

· Cards, flipcharts and markers

Team and participants

- Core team
- 15-30 participants
- External experts/scientists, representatives of other communities or of government agencies (optional)



Try opening the exercise first with an icebreaker. An icebreaker is any fun activity where participants get to know each other, laugh and feel more comfortable. Some of the best icebreakers are silly and physical. However, be aware of cultural sensitivities about touching and mixed groups.

Steps

Step 1: Opening - 30 minutes

There are many excellent ways to open a meeting. The worst way is spending too long doing it. During this session, be creative and brief, but be sure to cover the following:

- Introduce everyone. Consider using an icebreaker.
- Thank all participants for their attendance. Acknowledge any VIP participant, depending on cultural context or formalities.
- Discuss and revise the goals of the exercise.
- Introduce the agenda.
- Discuss meeting rules.
- Define participant roles.
- Learn group expectations: "What do we hope to achieve during this exercise?"
- Mention any logistics details.

Step 2: Personal scenarios - 11/2-2 hours

This activity eases participants into the exercise by asking them to think first about their own future.

First, ask the participants to think about a choice they made that changed their life direction, for instance, having children, getting married, quitting school.

Questions:

- What is a key decision that changed your life? How did it impact you?
- If you made a different decision, where would you be? What would be different today?

Instruct each participant to pair up with a person across the room that she does not know well. One person is the speaker and the other is the listener. Ask the speaker to introduce herself to the listener and to share the key decision. The listener then asks the speaker how her life would be different if she had made a different decision. Instruct the pairs to swap roles and repeat the exercise. Then, they introduce each other to the group. The facilitator can start this step with an example.



Introducing a participant using personal scenarios.

Discuss this step in the context of methods for thinking about the future:

- How did this decision impact your life?
- Were the outcomes under your control or were there outside factors that influenced the decision? This would be a good time to introduce the concept of "driving forces" (see page 44).
- What happens when we start thinking about other outcomes?
- Discuss the power of the phrase "What if...?".

Step 3: Presenting important issues - 11/2-2 hours

Invite external experts, community leaders or representatives of other stakeholder groups to give brief presentations on important issues facing the community. Topics might include new legislation, regional development plans or scientific studies of economic or environmental issues.

Method 1: Scenarios

Asking "What if...?" about the future.

Scenarios, guite simply, are stories about the future. They are creative answers to the question: "What if...?". Scenarios encourage us to open our minds to consider the range of changes or surprises that could occur in the future and think about their impacts. The method is particularly valuable in situations where changes are occurring beyond the control of a community.

Scenario building is not complicated. It is a systematic approach that transforms our natural tendency to ponder the future into a decision making tool. Scenarios do this by identifying "driving forces". Driving forces are key factors or changes that could impact a community. Examples of driving forces are new government policies, environmental changes, ethnic conflicts, market price shifts, health problems, roads, etc. Some of these driving forces are "certain", meaning that it is pretty clear where they are headed. Others are "uncertain"; they may or may not happen and their scale and scope is unknown. Some driving forces can be changed by the community. Others are beyond its control.

Scenarios can take many forms, but frequently they are narrative stories about the future that are logically consistent and realistic. Scenarios can also take the form of technical models, maps, or theater. The outputs can be quantitative, qualitative, or some mixture of the two (Alcamo 2001).

Objectives

- Leverage the experience and creativity of the entire community to consider what the future might bring
- Identify the driving forces that are affecting or influencing the community
- Discuss the consequences of possible future outcomes and their impacts on the community
- Develop contingency plans to effect change where possible, and to adapt where needed

Products

- Two to four scenarios, in the form of narratives, maps or models, depending on the desired output
- Contingency plans to prepare for each scenario

Time and materials

- 4 sessions of 3 hours each
- Flipchart, markers, note cards, masking tape

Team and participants

- One or more facilitators (one per breakout group)
- One note taker (can be from the community)
- 15-25 participants
- Historian (optional)
- External experts/scientists, representatives of other communities or of government agencies (optional)





The people of the community of Khe Tran in Vietnam depend on rubber plantations for their livelihoods. The international price of rubber varies depending on supply and demand.



Steps

Note: The order of the following steps is flexible. Some facilitators use an iterative process, by which they follow the steps several times to deepen discussion and enrich the scenarios.

Step 1: Identify historical eras of change and renewal – 1 hour This activity encourages participants to think about the inevitability of change, even when a situation might appear to be stable. Participants may also discover transitions in the past that could influence possible scenarios in the future.

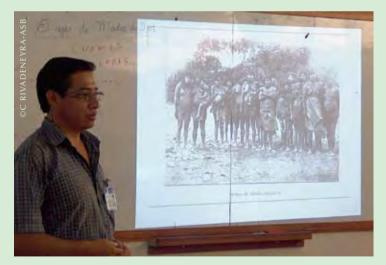
Select a timeframe such as 100, 1000, or 10,000 years. Choose the longest timeframe that is understandable to the group. Piece together several sheets of flipchart paper and draw a long timeline divided into increments of years. Ask the participants to write or draw important local events on the timeline. Identify eras and trends.

Discuss changes and identify the forces that drove those changes. It might be helpful to invite a historian or a community elder to lead this discussion.

In some communities, the participants may not be used to thinking in terms of historical eras, or information on the history of the area is not available. Perhaps the way a community thinks about history and records it is different from the way the core team thinks about history. Discuss with the core team whether the participants will be receptive to this activity and if there are resources such as elders' knowledge, outside facilitators, or historians. It is important not to overload participants with too much detail, so use your best judgment as to how extensive you make this exercise.

Learning a bit more

During the Scenarios exercise "Exploring the Future" in Madre de Dios, Peru, the core team realized that local people were not aware of the area's past. Since there was no local historian or museum, a foreign artist, who had lived for a long time in the area and was knowledgeable about its history, was invited to speak (Prieto et al. 2006).



Presenting information on the history of the area will help people understand changes that have occurred.

Change is the only constant

In a Scenarios exercise in northern Wisconsin, the community considered the changes that might come to the region. At the beginning of the exercise, it became clear that there were strong opinions against change; participants wanted to keep their town and surrounding area exactly the same. In order to understand that the region had in fact always been changing and would probably continue to change, facilitators introduced a presentation about the long-term history of the region (see Figure 5). The participants then mapped out the history on a timeline: early human colonization approximately 10,000 years ago, the subsequent disappearance of mammoths and other mega fauna, colonization and forest clear cutting by Europeans, recent development acceleration and redevelopment. Participants then grouped the events into eras: the "Age of Discovery", the "Age of Rediscovery", and the "Age of Development". Thinking about these historical eras and times of great transition helped participants realize that change, not stability, is the true constant in the region (Carpenter et al. 2003).

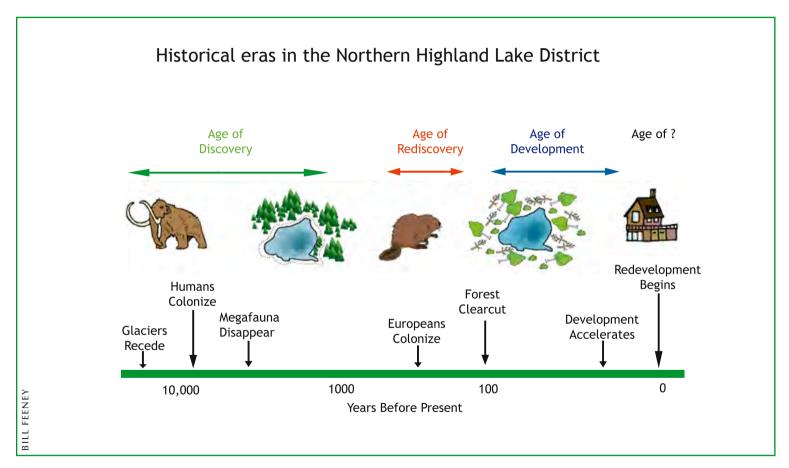


Figure 5. Historical eras in the Northern Highland Lake District (adapted from Carpenter et al. 2003).

Step 2: Identify the focal questions - 1 hour

The focal questions are the main concerns or topics of the exercise. The scenarios should ultimately answer these questions.

Ask the group:

"What are your main concerns or issues about the future in relation to the goal of the exercise?".

Have the participants brainstorm their ideas as a group or individually by writing them down on cards. This step can also be done in breakout groups first and then the results compared with the full group. When the group has narrowed down to several focal questions, write them on flipchart paper and leave them on the wall. Return to the focal questions frequently during future discussions to make sure that they stay central to the exercise.

Step 3: Identify driving forces – 1 hour during a formal exercise or 1 day of informal discussions

Driving forces are those factors that might influence the future of the community and the topic of the exercise. Divide into breakout groups to brainstorm about driving forces.

These questions can help start the brainstorm:

- Given the historical eras that we just identified, what do you see as the key drivers of these eras? Do you think these drivers will continue to be important in the future?
- What are important changes happening in the community? What is causing those changes?
- What things stay the same in the community and what keeps them stable?
- What has been happening to the environment (forest, streams, rivers, animals)? What is causing these changes?
- How are natural resources being used in your community? Do you expect that to change?
- How is the farming? Has it been changing?
- What is the government doing that is impacting the village? How does the village interact with the government?
- How is the community's relationship with neighbors? Will that change in the future?
- What is transportation like in your community? How is transportation likely to change in the future?
- How do most people make a living? Do you expect that to change? How?
- Are the families healthy? What is the most important factor affecting health?
- How do you think your children will be different from you? Why?
- What are some concerns or problems that you have or that you foresee?

Next, instruct the participants to review the list and classify each driving force as "Certain" or "Uncertain". Certain driving forces are those which have a known and fairly obvious direction or result. For example, it is fairly certain that population of the world will continue to increase. Uncertain driving forces are those which have an unclear direction and the potential impacts are not obvious. For example, the government might be discussing building a new road through the region. Whether the plan will be adopted by the government though is highly uncertain. It is also unclear how this new road might affect the community. Discuss which driving forces may be opportunities or threats.

Tips and options:

- Participants might not be aware of a driving force that a facilitator deems important. For instance, in Scenarios exercises in communities in the Amazon of Peru, many community members had not thought about the impending construction of the Trans-Oceanic Highway (Ugarte et al. 2006). The facilitator or external expert can introduce new elements to the discussion. However, she must be careful not to direct the process too heavily.
- The facilitator can also learn about relevant driving forces during casual conversations and informal interviews in the village.

Selecting driving forces in the Bolivian Amazon

For most families in the northern Bolivian Amazon, Brazil nut collection provides the only significant source of income. However, many aspects of the harvest are beyond the control of local people. For instance, the price of the nut is set by international markets and varies widely from year to year. Transportation in the region is poor and unreliable, particularly in the rainy season when the nuts are collected. In Scenarios exercises, communities identified that the two most important driving forces that affect them are the price of Brazil nut and the quality of transportation to their village (see Figure 6).

Step 4: Defining the starting points - 1 hour

This step creates the opening sentences of the scenarios. It is the equivalent of saying: "Once upon a time... (fill in with starting points)".

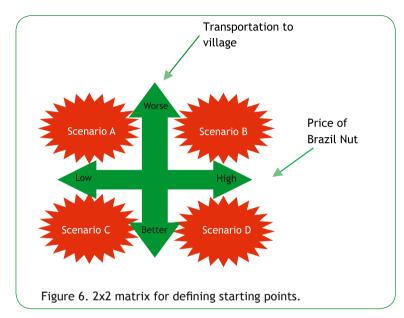
Each scenario has a different starting point. There are four options for creating the starting points:

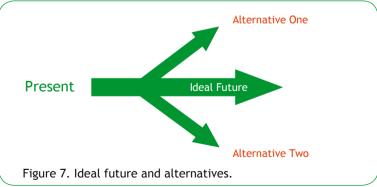
Option 1. The group selects several of the uncertain driving forces from the prior step. For each uncertain driving force, the group imagines several possible futures. The scenarios unfold from differences in the trajectories of these driving forces. For example, an uncertain driving force for a community next to a national park may be the number of tourists who come to visit. Two possible scenarios would be a dramatic increase in tourism or a slow, steady decline in tourism. Then participants can insert other driving forces, such as population growth, into the scenario to see what happens.

Option 2. Select two driving forces to create a 2x2 matrix. By arranging these two driving forces into a 2x2 matrix, we define the starting points for four possible scenarios. For example, Figure 6 shows a 2x2 matrix from the Scenarios exercise in a village that depends on Brazil nut collection for its income. In Scenario A, the starting points would be: "What happens if the price of Brazil nut drops and transportation to the village gets worse?".

Option 3. If there are more than two driving forces to consider, instead of the 2x2 matrix, try combining various possibilities of the driving forces to create several possible sets of scenario starting points.

Option 4. Use the Visioning exercise to define the ideal future that the community wishes (see Method 3: Visioning on page 57). Then use this vision as a starting point. Explore what needs to happen for this ideal future to be realized. What could fail about the ideal





future? Next, develop at least two stories of the future that diverge from the ideal future in provocative and plausible ways (see Figure 7).

Tips and options:

- In some situations it might be preferable and simpler to choose a single driving force and create just two scenarios. See Figure 8 for an example from a community that collects Brazil nut.
- Instead of using driving forces to define the scenario parameters, some facilitators use the answers to the focal questions as the starting points to define the scenarios.
- For some groups it might be best to skip this step, go straight to building narratives, and return here later to discuss how the driving forces relate to the scenarios.



Figure 8. Using a single driving force as a starting point.

Step 5: Create narratives - 2 hours

Next, participants use the starting points to weave rich, coherent, plausible narratives. Divide the participants into several groups of 4-6 people plus a facilitator per group. Each group receives a different set of starting points.

Ask these questions to get the group started:

- What happens if (insert starting points here, for example Brazil Nut prices fall and transportation to the community gets worse)?
- Then what?
- What happens next?
- What will be the consequence of that?
- How will people react if that happens? What will they do next? Who will push for what kind of change?
- What is the basic logic in each scenario?

Continue asking these same questions to push the story further and deeper. Point out any inconsistencies and ask participants to reconcile them. Make sure that the story includes the entire cast of characters as well as other driving forces that they have identified. If the group loses focus, pull the discussion back on track. Once the group has reached the logical end of the story, ask someone from the group to read it to the others to review it. Another possibility is to draw a time line on a flipchart paper and invent some events in the future that might happen and represent how the different drivers play out (see Figure 9).

Sometimes it is helpful to explain this step by comparing a scenario to a movie. A movie has actors, action, scenes, conflict, comedy. drama, happy endings, or sad endings. A scenario should have the same elements as a good movie. Encourage participants to stretch their imaginations to think about what might happen in the community. Consider storylines that are unlikely, as long as they are plausible. If the stories are dull and predictable, the participants are not thinking outside traditional boundaries. The most successful scenarios are ones in which there are interesting comparisons between two or more of the storylines and where the storylines stretch beyond what most people are already thinking about.

Make sure that a note taker is recording all discussion as the scenarios are developed.

Tips and options:

- Have each group create at least two scenarios. This will stimulate thinking about different outcomes and make each scenario better.
- Because the success of the activity depends on good facilitation, it is helpful to have one facilitator for each breakout group.
- Try building scenarios using a time line. Then ask people to think about what happens at each point in time. This can help them write a story.
- Sometimes groups can get stuck on this step. A good way to break this roadblock is to force the breakout groups to come up with outlines for a set of 3 to 4 stories in 45 minutes or less. This process can be repeated a few times, with full group discussions in between, to deepen the stories.

Scenario name: Adaptive Mosaic

Demographics Pandemic	Pandemic suppressing population growth	Pandemic solved High population growth slower urbanization urban exodus	Pandemic solved Population growth slows down, lower demand for food in cities	Pandemic solved High population growth	9.5 billion population
Economics wto failure	Economic growth at regional level low, bilateral agreements	Low economic growth as a result of high energy prices	Regional economic cooperation, integration	Economic growth improves; equitable trade within regions	More equitable economic growth; discerning consumers
Culture and ethics	More cultural diversity, traditional foods developed	Recognize and promote cultural diversity and integrate cultural diversity	Integration of cultural diversity increased. Use optimal characteristics of different cultures		
Policy frameworks	Farmers paid for ecological services (landscape, less use of pesticides, etc.) instead of receiving subsidies for production	Poticies to develop more local production of food and energy. Policies shift money towards security and less money for technology development			
Socio political	High investment in social capital, high costs to maintain food security	Food quality standards stricter; common resources well defined Rights & responsibilities in common resources well defined and implemented	Decentralized governance improved; restrictions are increasing		
Natural resources availability, access		High pressure on rural land in developed countries (urban exodus, flooding)			
Energy prices rocket	Development of renewable energy technologies as an alternative for fossil fuels	Less development of renewable energy more production for food in developing countries			
20	010 2	020 2	030 2	040 2	050

Figure 9. Example shows how to track developments of various driving forces across time (IAASTD Scenarios Working Group, 2006)

Step 6: Present and discuss - 2 hours

Bring the groups back together and have each group present its narrative for the others. Discuss the implications:

- Does the story make sense? Is the story plausible? Why or why not?
- What points in this story can the community control?
- What aspects of the story are not in the community's control?
- What are some lessons learned from this story?
- What are the key points that the community could monitor to see if this story is actually occurring?
- Who are the "winners and losers" and how does this vary across the stories?
- How would the community be different in each of the scenarios? How would it be similar?

Give the scenarios creative names or movie titles (avoid numbering them).

Step 7: Refine the narratives and analyze impacts - 3 hours

Return to the original breakout groups and have each group refine its scenario narrative based on the feedback. The group should check for consistency and plausibility. Introduce a shock or surprise into the scenario. How do the stories change? Are they still credible? How does the community adapt to the surprise?

After the groups have refined the narratives, have them discuss the impacts of their scenarios:

- What if the future happens the way it is told in this scenario?
- Who gains, who loses in each scenario?
- What actions would I take today to prepare?
- What actions might the community take?
- Are there actions I could take to bring about a desirable future, or to mitigate a negative one? (or to mitigate the impacts of a negative one on me, my family, and my community?)
- Would the leaders and powerful people in the community be different in different scenarios?

Then instruct the participants to create a list of the three most important opportunities and threats to their community that each scenario would bring. For each opportunity and threat, have the group develop a plan for the community to prepare for this possibility. See Figure 10 for an example.

Encourage participants to think of ways they can benefit from each opportunity:

- How can we make sure we take advantage of this opportunity?
- How can we prepare for it?

In the case of the threats:

- What can be done to prevent this threat?
- If it is not possible to prevent the threat, how might its negative impacts be mitigated?

Opportunities	How will we take advantage of this opportunity?
1.	1.
2.	2.
3.	3.
Threats	How will we try to prepare for this threat?
1.	1.
2.	2.
3.	3.

Figure 10. Preparing for opportunities and threats.

Have all the groups return together and present their work. Discuss and record the reactions and suggestions.

Following are two scenarios produced by Brazil nut collection communities. At the time of the scenarios, the price of Brazil nut was \$12 per box, but was prone to fluctuate.



Brazil nut is a natural forest product that employs the majority of people in the northern Bolivian Amazon. While dependent on the nut for their livelihoods, the price fluctuations make it difficult for families to improve their lives.

Movie Brazil nut: \$3 Per Box

"When the price of Brazil nut drops to \$3 per box, there won't be enough money for the families. The young people won't be able to leave to study, so they will have to stay here and work or leave for the city to find work. The children won't eat well: only once a day, and they will go about barefoot with their bellies full of sand. The homes will become rustic, made of bamboo and vines. When we have health problems we won't have money for medicine so we will have to use traditional medicine from the forest. People will leave the community. The community will be left with only 3 to 5 families. The school will be abandoned because there are not enough students. A patron will buy the land of the community and make it a Brazil nut estate again. Those who stay will focus on farming: plantain, rice. However, we won't have problems with the neighbors anymore because they won't bother to come and harvest Brazil nut in our forests. So we will all be friends. The road will be in better condition because the Brazil nut trucks won't be coming anymore and won't ruin the road. The merchants will not come either, so we won't be able to buy things here. The municipal government will stay the same, doing nothing".

Movie Brazil nut: \$20 Per Box

"When the price of a Brazil nut goes up to \$20 per box, we'll have more money and a higher quality of life. We'll be able to buy more, and the children will get what they wish for. The young people will leave the community to study in town. The children will be well fed because we'll be able to buy food in the municipal capital such as vegetables and meat instead of just rice. The houses will improve, made of jattata (palm leaf) and cement and brick. We'll also be drinking more beer. The community will improve because all of the families will make contributions, and with these contributions we'll be able to be counterparts for projects and negotiate better with the municipality. We'll have a high school, a health post with a nurse and a first aid kit for the community. We'll also have an agreement to improve the road.

There will be more merchants because when the price of Brazil nut goes up, you find merchants in every corner. We'll negotiate with them to make them keep prices under control. We'll take better care of our forest, for example cutting the vines from the Brazil nut trees. But more people will invade our forest to harvest Brazil nut, and we'll have to be more vigilant. There will be more struggles and conflicts over the forest. Our agriculture plots will turn to forest because we'll abandon agriculture. We should prepare for when the price of Brazil nut drops and save money when the price of Brazil nut is high".

Method 2: Projections

Forecasting the future based on what we know about the past.

Projections, also known as trend analysis, examine past trends to try to forecast what will happen in the future. Projections tend to be based on hard data or information. Projections are excellent for forecasting short-term future trends based on past and present experience. For instance, it is possible to forecast the population that a community will have in five years based on how it has changed in the past. This can be very valuable information for planning. However, projections are not as effective at examining the impact of possible events that have not happened in the past, such as an outbreak of disease, a new road, or a change in laws. Therefore, projections are best for short-term planning, usually five years or fewer.

Projections work best with measurable information. Although the information might be very specific, it can indicate larger trends.

Objectives

- Identifying past and present trends
- Using the knowledge of the entire community to try to predict where current trends are heading
- Discussing the consequences of these possible future outcomes and their impacts on the community
- Developing contingency plans to monitor change and adapt

Products

• Graphs, charts or maps of future trends, usually in the form of hard data

Time and materials

- 2 sessions of 2 hours each
- Flipchart, markers, masking tape

Team and participants

- One facilitator
- One note taker (can be from the village)
- 15-25 participants



Men

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Steps

Step 1: Define topics and identify indicators – 2 hours

Discuss the exercise topics. What changes in the future do the participants want to project? Examples might be forest cover, health. agricultural production, water quality, incidence of disease, or community population changes. Then, for each topic, identify a specific indicator. An indicator is measurable information about a situation that provides a sense of larger trends.

Brainstorm in a group about the indicators related to the topic or issue. Identify causal links between indicators and other factors involved in the change. Is the indicator a reliable measure of change?

Step 2: Collect data on indicators - Variable

Examine existing data on the indicators, such as from a participatory rural assessment, census, or land use maps. Try to find information from as far in the past as possible. Collect any current data as well. This step may require several weeks.

Tourist visits as indicators

During a training event in Vietnam, participants wanted to predict future trends in tourism in Bach Ma National Park. They selected visits by tourists to the park as the indicator. In the past, tourist visits were very low, but increasing every year. The participants recognized a pattern and ascertained that the number of tourists had doubled every year. However, when participants tried to predict the tourism growth by doubling the number of tourist every year for 5 years, the results were unreasonably large. They returned to their data, and realized that the pattern was slightly more complicated than simply doubling. The number of additional tourists each year was doubling, but not the total number of tourists. Their projection into the future using this new pattern became more realistic. When discussing the results. participants recognized the value of the information for planning. They also discussed the limitations of projections. For instance, tourism growth depends on many things, such as the economy, infrastructure, or international events. A natural disaster or terrorism alert abroad would disrupt the trends and make the projections irrelevant (Evans 2006).

Step 3: Construct projection grid - 2 hours

Divide up into groups and assign indicators to each group. Construct a grid of the indicators. On the top row, construct the timeline. Pick any timeframe that is important, by day, month, or years. On the left column put the indicators. See Figure 11.

Now, fill the grid with the data that you have for the past and present. Use creative visual representation of the data. For instance, use seeds to represent numbers (1 seed could represent 10 people for village population), or shade in the box to show percentages.

Discuss the results:

- Is there anything here that surprises you?
- Are these projections plausible? Why or why not?
- Which of these trends might be good for the village? Which might be bad? Why?
- Are there any of these trends that you would like to change?

Now, add a row to the bottom of the grid, "Certain key events". These are events or changes that are very likely to occur. Brainstorm on certain key events in the future that might impact their projections and fill the certain key events in the bottom row. Ask the participants how they need to revise their projections in order to take into consideration the certain key events.

During a facilitator training for forestry professionals in Hue, Vietnam, participants experimented with different ways to visually represent the quantitative data of the projections, using pebbles, seeds, and cut out paper. They wanted to make the activity more understandable in communities where math and reading skills are low.



Workshop trainees in Vietnam experiment with ways to make projections easy to understand in a community context where reading skills are low.

Next, add two additional rows to the bottom of the grid. Name one "Uncertain key events" and the other "Surprises".

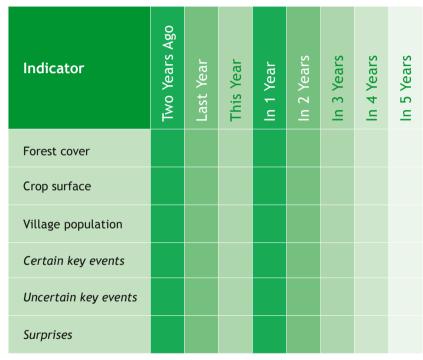


Figure 11. Sample projection grid.

Ask people what uncertain key events might happen. These are important events that may or may not occur. Examples could be a decrease in price of a cash crop or a new road being built. Have participants fill in the impacts of these events in the bottom row and adjust their projections. Then ask people to think of surprises that could impact them. Examples might be a flood or an epidemic. Discuss how these surprises might affect the trends.

Discussion questions:

- How will these events affect the projections?
- Are they events that the community can control?
- Are there actions to take to prepare for these events or affect their outcome?

Step 4: Group discussion - 30 minutes

Bring the group back together and have everyone present and compare their results. Discuss the various outcomes based on inserting certain and uncertain key events as well as surprises. There will be many possible projections; try to narrow them down into three or four that can be easily explained. Promote a discussion about how to prepare for the trends or try to change them.

Discussion questions:

- How will these trends affect you and the community?
- Are they positive or negative?
- Can you change the outcomes of these trends?
- How can you prepare for these events?



Visioning exercises can help people imagine the future shortterm or long-term. For this exercise in Bolivia, the community decided to think about their hopes for the community in 10 years.

Steps

Step 1: Decide timeframe and discuss today's concerns – 1 hour Discuss the timeframe for the vision. The number of years will depend on the situation. Perhaps the local government uses 5-year planning cycles. Maybe the community is participating in a 20-year forest management project. It may be more useful to imagine even further into the future.

Divide the participants into groups of 5-8 people each. In each group, have a map or photographs of the community available and spread them out in front of the group. If there is information available from other activities, such as participatory rural assessment, provide those results. Start a discussion with the participants about their village today:

Discussion questions:

- Describe your community.
- What are the families like?
- What is the land and forest like?
- What do people do for a living?
- What are concerns or problems in your village?
- What would you like to see changed and why?
- What are good things that should not change?

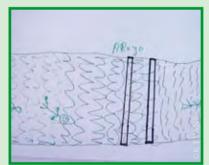
Make sure the note taker is recording the discussions in each group, or participants may wish to draw their concerns.



Small group discussions improve participation, particularly by women. Here women in the village of Thuong Nyat in Vietnam draw their vision for their community.











Example of the concerns expressed by women in the northern Bolivian Amazon during a Visioning exercise. Clockwise from upper left: illness, unfinished well, dirty stream, dark house with insects and illness and dilapidated church.

Step 2: Develop the vision of the future - 1 hour

There are three suggested options for building a vision of the future.

Option 1: A walk in the future

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

Elaborate as much as possible to try to pull the participants into an imaginary state. Have fun, but be careful! Do not attempt to tell them what they see in the future; that is their job.

Now lead the group in a walk around the community. Stop at specific points in and around the community, such as the stream, well, road, school, 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. Make sure the note taker is recording the discussion.

Discussion questions:

- What do you want to see here in twenty years?
- What are people doing?
- What are the families, the children, the trees and animals like?
- What does the land around the community look like?
- What are people doing for a living?
- How has the community changed: the houses, roads, water, and school?
- What has not changed?
- You discussed problems earlier; how have those problems been solved?

Visioning can lead to breakthrough moments

During a training event in Vietnam, trainees expressed reluctance to engage in Visioning with ethnic minority villages. They questioned the method's relevance and were afraid it would lead to wildly unrealistic expectations. When they implemented the activity in the village of Khe Tran, they were surprised. The vision developed by the villagers focused on improving well-being and livelihood strategies with a long-term sustainable forest management plan. The trainees then discussed how it had in fact been their own visions that had been limited by short-term project objectives. This was a breakthrough moment for the trainees (Evans 2006).

Option 2: Guided vision

This approach is ideal if the exercise is not taking place near the community. It can also free people from the constraints of their current situation because they are not physically walking through their community, unlike in a "Walk in the future". If effectively facilitated, this method can be very powerful.

Request that participants sit quietly, relax, close their eyes, and clear their minds.

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 village 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?

After fifteen or twenty minutes of imagining, the participants open their eyes and write down or draw the things that stood out most in their vision. Then, comparing these ideas, it becomes clear how similar or different everyone's expectations are. These scripts are only examples and should be adjusted based on the context.

Option 3: Building on the best

If participants already did Scenarios, they can use the scenarios as a starting point for the Visioning exercise. Ask the participants to present their scenarios and identify all of the positive aspects. Break into small discussion groups, and have the participants discuss those positive aspects or qualities. Then ask them to think about an ideal future based on those aspects. Some things might not be possible or make sense when put together. The participants should discuss these issues and decide what aspects to keep.

A talk into the future helps to set research priorities

During a research conference, Vietnamese forestry researchers and policy makers came together to discuss how future research can better meet the needs of smallholders. They engaged in a Visioning exercise where each person imagined a discussion with a farmer ten years in the future. In this imaginary future conversation, the farmer talked about what scientific information he or she needed to help improve his or her livelihood. This exercise helped the group decide which research programs should be started today to meet future needs (Evans, personal communication).





Example of the children's vision for their community in the year 2020, Chalaco community, Piura, Peru.

Step 3: Drawing tomorrow's vision - 1 hour

After the "Walk in the future", the "Guided vision", or "Building on the best", return to the workspace and ask the participants to draw or write down their desired vision in small groups. Groups may wish to share a large poster-board so that everyone can participate at the same time, and those without reading skills can also contribute. This step is best done without facilitation, allowing the participants to organize themselves and decide how they will complete the task.

Option

 Provide participants with several photos of different landscapes, from rural to urban. They can use them to do a collage instead of drawing.

Step 4: Presenting, discussing, and ranking - 1 hour

Bring the breakout groups back to the workspace. Tape all of the visions on the wall and have each group presents its work. Then ask the entire group to discuss and compare the visions. During this process, a note taker writes out a list of the ideas presented on a flipchart.

Discussion questions:

- 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?

After the group discussion, post the list of ideas on the wall to vote on them. Each person receives several votes and can place his votes next to one or more of the ideas that are the most important to him. Count up the stars and rank the ideas. This activity requires that the participants share their ideas, understand the concerns and visions of the other participants, and prioritize them together to arrive at a consensus. It also gives an equal voice to all participants.

Discussion questions:

- 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?
- What will be the next steps that you will take with them?
- Can you do this again on your own, without a facilitator?



Voting exercises ensure that all participants express their opinion.

Method 4: Pathways

Developing strategies to achieve our goals for the future.

Pathways create a bridge from the present to the future by comparing how things are today with an ideal future or desired goal. Then participants identify how to change the present to reach the future. They do this by developing specific plans and strategies. If a community has already identified goals that they want to achieve, such as through visioning, pathways can give the community a planning structure to do so. Pathways can also help communities prepare for both positive and negative outcomes which makes the method a good follow up to Scenarios.

Objectives

- Developing a specific plan broken down into steps of how and when each step will be carried out and who is in charge of doing it
- Arriving at a consensus about priorities
- Learning skills for collaborative planning

Products

- Written plans defining specific steps and responsibilities to reach a goal
- Monitoring plan to ensure follow through

Time and materials

• 3 hours

elements

• Flipchart, markers, masking tape

Team and participants

- Two facilitators
- One note taker (can be from the village)
- 15-25 participants



Small group discussions improve participation and draw out some of the most creative ideas.

Steps

Step 1: Discuss the future and analyze the present - 1 hour Ask the participants to decide on three or four goals for the future that they want to achieve. It may be helpful to do a Visioning or Scenarios exercise first to help them think about their ideal future and identify goals.

Next, for each goal, have the participants explore the present situation. Ask them to identify what they have to change about the present in order to achieve their desired goal: How is the present reality different from the future goals? What are we lacking? What is keeping us from achieving our goal? If they did a Visioning exercise, they can compare their vision of the ideal future with their current situation to identify what is different between the two.

Next, have the participants analyze the advantages or resources they already have at their disposal in order to achieve their goal: Do we have talents or skills in the community that will help us? Do we have resources or rights that we can leverage? Are there partnerships with other communities or institutions that we can develop?

Step 2: Develop strategies to reach the goals - 1 hour

Next, for each obstacle or element missing, the participants create a strategy of "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 12 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.

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Step 3: Group discussion - 1 hour

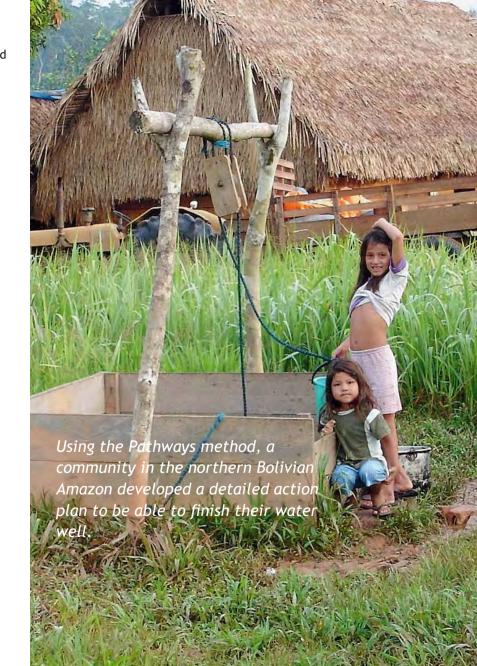
Bring the breakout groups back together and have each present its strategy. Analyze and discuss together, allowing for adjustments. Suggest steps for monitoring progress on the strategies.

Discussion questions:

- Are these strategies reasonable?
- What will be the biggest obstacles or possible points of failure to the strategies? How can we improve them?
- What other people outside of the community will you have to include in this process?
- How will you ensure that the people assigned to a task complete it?
- When will you evaluate the progress of these strategies?
- Who will be in charge of organizing the evaluation?
- Would you be able to do this now without a facilitator?

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.



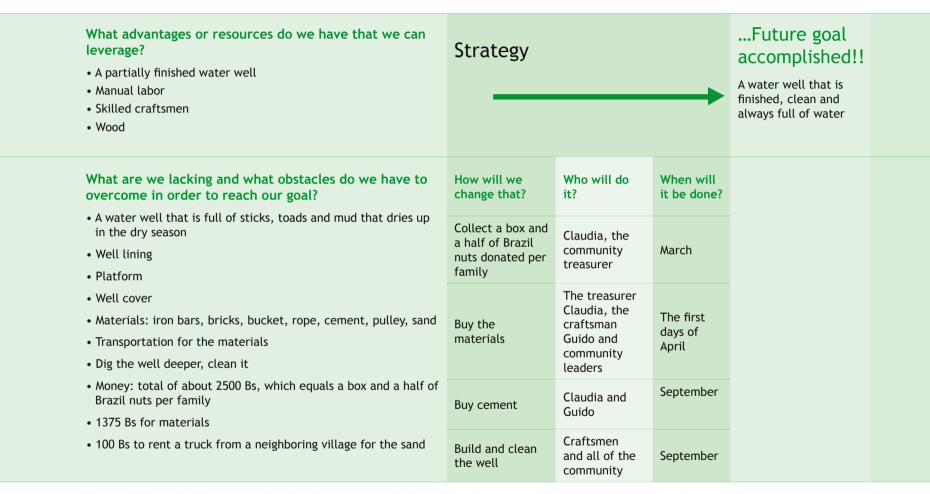


Figure 12. Example of a strategy developed in Amazonian Bolivia to finish an incomplete water well project in the community.

Putting It All Together

Now that the exercise is over, the work is done, right? Not yet! Follow through is just as important as the exercise. With effective follow through, the exercise can create awareness in the community about pressing issues, reach key decision makers and bring about positive change.

Step 1: Review and critique

Discuss with the core team what went well, what went wrong, and how the exercise could be improved next time. Talk about the tangible results and intangible impacts of the process. Share notes and ideas and review the results of the participant evaluations of the exercise, and assess if the objectives of the exercise were achieved.

Step 2: Finalize and implement the dissemination plan

Review the dissemination plan with the participants. Asking participants for their input will not only provide new ideas, but will also encourage the participants to disseminate the results. Request that participants volunteer to assist with the follow up activities. Responsibilities might include making presentations to stakeholder groups, talking about the exercise on the radio, or presenting the results to local authorities. Set specific dates to return to the community to follow up on the dissemination plan.

Showing by doing: How the methods caught the notice of local and regional government officials

In the northern Bolivian Amazon, CIFOR researchers used Visioning and Pathway exercises in two remote Brazil nut extraction communities. They then organized follow up meetings with members of the municipal government. At these meetings, the community leaders presented their results to the mayor, municipal council, and other community leaders. To demonstrate the methods, the community leaders helped lead the local government officials in Visioning and Pathway exercises, using the techniques they had just learned themselves. The local government was impressed with the methods and adopted them as part of their municipal planning process with all local communities. Community leaders wrote letters to CIFOR requesting the exercises in their communities too. After seeing the same presentation at the departmental level, regional decision makers considered making the methods part of the planning processes throughout the entire department (Evans, personal communication).

Scenarios predict a disaster, but authorities ignore the warnings

In 2002, the local newspaper in the city of New Orleans in the United States published a series of scenarios based on computer models and expert opinion to describe what would happen when a hurricane hit the city. The scenarios predicted that floodwalls would collapse, the city would be inundated by massive flooding with great loss of life, property damage, and up to a million evacuees would be left homeless (McQuaid and Schleifstein 2002). In 2005, the scenarios played out almost exactly as predicted when hurricane Katrina struck the city. If authorities had paid attention to the scenarios and responded to the recommendations—strengthening floodwalls, restoring coastal wetlands, preparing evacuation plans—the worst impacts of the disaster could have been averted.

Suggestions:

- Create eye-catching visual aids, for example 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 organize a storytelling hour where participants talk about the future.
- Distribute results to participants and community members. Post the results in a public place so that everyone can see and discuss them.
- Organize a community meeting to present the results. Encourage the community to suggest ways in which they can use the results.
- Organize presentations where community members can share their results with the local government and other communities. Invite external audiences such as regional governments, and environmental and development organizations.
- Discuss with local government officials how they can adopt the methods for thinking about the future as part of their planning processes. They are more likely to be convinced if they can participate in a short exercise to understand the methods.
- Involve the local press. Provide them with written materials. Suggest that participants talk about the exercise on a radio program.

Step 3: Follow through with monitoring

Review the monitoring plan that was developed in "Getting Ready". Discuss and revise it with participants. Plan specific timeframes and events for the monitoring and follow up meetings with participants to gauge progress.

4. Facilitation Skills and Tips

"When a meeting leader uses facilitation skills well, people contribute, meetings are productive, and the leader's work appears effortless." (Training Resources Group 1992)

The success of the methods in this book depends heavily on good facilitation. Following are a few pointers.

Facilitation Skills

Paraphrasing. Paraphrasing helps participants follow the discussion and assists the note taker in accurately recording the important points. Use your own words to reflect what an individual speaker is saying and how that speaker is feeling by saying the following:

"If I understood well, what you mean is..."

"I think what you are saying is..."

Questioning. Ask questions to explore a comment or issue. Open-ended questions usually begin with "what", "how", "when" "where" and are posed in such a way so that speaker has to elaborate with more detail. Clarifying questions draw out the speaker's point often begin with "which", "why", "do you

mean to say", etc. Closed questions can be answered with a "yes" or "no" and are asked to get specific information.

Encouraging participation. Use facial expressions, body language and comments to encourage the speaker to say more about the situation. Some examples: nodding one's head or saying "Uh-huh", repeating a sentence or part of a sentence, or saying "that's interesting, does anyone have something to add?", mirror the feelings "It seems to me that this is a happy thing for you...". Listen to and respect all of the participants' opinions. The facilitator should never assume a "know-it-all" position or inject her opinion. When walking and talking with participants, bring stragglers into the group and ask them to share their opinions.

Maintaining high energy levels. Capture the attention of the participants and keep their energy levels high by doing short sessions, changing facilitators or facilitation styles, changing the furniture set up, and using different dynamics of interaction. Always have a few energizers ready to use when the energy level lags; these could include physical exercises like stretches.

Summarizing. Identify and verbalize key elements or details of the conversation. The purpose of summarizing is to pull important ideas, facts or data together, establish a basis for further discussion, make

a transition, review progress, and check for clarity or agreement. Identify and verbalize key elements or details of the conversation. When summarizing, avoid aligning yourself with particular viewpoints: a facilitator should remain neutral. You could start by saying: "There seem to be some key ideas expressed here...", "Let's see what we have covered so far ...", etc.

Dealing with difficult participants. Difficult participants or "disrupters" can upset the flow of discussion by being rigid, rude, silent, or not being serious. They may interrupt, dominate or fidget. Take any of the following actions depending on the disrupter:

- Ignore politely.
- Interrupt politely, but clearly.
- Stop the discussion.
- Talk it out publicly or personally to find out what is behind the behavior.
- Acknowledge and postpone.
- Form breakout groups (dominant participants can be more easily controlled in small groups and have less influence).
- Divert attention by starting a new activity.
- Engage the disrupter in controlled debate.
- Ask others for help.

If the behavior persists and threatens a successful meeting (this is very rare!), the participant should be invited to leave the session.

Moving along. Avoid taking up too much time discussing the same subject or being repetitive. On the other hand, be aware that having too little discussion might prematurely assume consensus when in reality not all opinions have been heard. Determining when a group has talked about something just enough—not too much, not too little—is not an exact science but is a very important facilitation skill.

Getting to closure. Summarize discussion to help the group move towards agreement. When agreement is difficult, the discussion should be facilitated openly and positively. Work to summarize major points of disagreement and alternatives without dominating. Creative ideas and mutual understanding often emerge out of disagreement.

Capitalizing on diversity. When working with a diverse group, take time to discuss the roles that all participants play and the value of different opinions. Participants with different religious affiliations, races, ages, jobs, education or economic level contribute distinct perceptions and experiences. Disagreements are inevitable and a good sign of worthwhile discussion. An experienced facilitator can channel diversity into a constructive, positive outcome. Organize people into small groups to encourage participation by less vocal participants. Consider separating men and women, neighborhoods, or generations for some activities, and then have the groups share. If unsure about cultural sensitivities, consider asking the community how the groups should be divided.





More Facilitation Tips

- Post a "road map" of the activities on the wall to keep the exercise on track. This can be a picture drawn on a flipchart of the activities or a written agenda. Refer to it frequently.
- When brainstorming, emphasize that participants should feel free
 to express any ideas. Approach every contribution with respect
 and interest, gently probing to generate subsequent ideas. Set
 out the ground rules: no evaluation or discussion until all ideas are
 recorded, everybody participates.

• When situations get emotional or heated, help the participants analyze their ideas objectively by categorizing them:

Fact: a commonly agreed upon truth that is verifiable

Opinion: a personal or group view on a topic

Rumor: unsubstantiated information

Feeling: I don't want something to happen / I fear...

- Use examples as much as possible when explaining concepts.
- Use the breaks to evaluate the development of the exercise. Ask participants' opinions about specific activities.

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More Resources

Websites

Collaborating institutions

ASB - Partnership for the Tropical Forest Margins - http://www.asb.cgiar.org CIFOR (Center for International Forestry Research) - http://www.cifor.cgiar.org Millennium Ecosystem Assessment - http://www.maweb.org World Agroforestry Centre - http://www.worldagroforestry.org

About Scenarios

Shell Scenarios - http://www.shell.com/scenarios The Global Business Network - http://www.gbn.com

About Participation

Eldis Participation Resource Guide - http://www.eldis.org/participation

FAO Informal Working Group on Participatory Approaches & Methods http://www.fao.org/participation

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6. Annexes

Annex 1: Example of Logistics Checklist

This form helps the core team organize the details of an exercise. The example below is of an event held in Peru.

"Exploring the Future of Madre de Dios".

28-29 May 2005, Universidad de Madre de Dios (UNAMAD), Puerto Maldonado, Madre de Dios

RP=Rocio Prieto (Coordinator and Facilitator), FP=Francis Patiño (Assistant and Facilitator), SD=Silvia Dupuy (Administrator), SV=Sandra Velarde (Backup at ICRAF headquarters), JU=Julio Ugarte (Facilitator), CR=Carlos Rivadeneyra (Note taker), EM=Elsa Mendoza (External facilitator), PD=Patricia Drumond, special guest (Embrapa Acre), G=Mr. Gonzalo (Logistics assistant).

ACTIVITY	PERSON RESPONSIBLE	BY WHEN/COMMENTS
PRE-MEETING ARRANGEMENTS		
Application package	RP to prepare FP (UNAMAD)	30 packages sent to local universities and technical institutes 1st May (G)
Budget & expenditure Request advances	RP/FP/SD RP to receive from SD (in Lima)	15th April
Applications compilation & process	RP/FP	About 20th May
Selection panel	RP/FP	About 20th May
Official UNALM/ICRAF/ASB Invitation letter – indicating 100% funding to external facilitators/participants from Brazil Confirmations (letter stipulating conditions, e.g. travel covered, all expenses, etc.)	RP	Mid April RP to confirm with Elsa Mendoza (Acre University, Brazil) and Patricia Drumond (Embrapa Acre) on formalities needed

ACTIVITY	PERSON RESPONSIBLE	BY WHEN/COMMENTS
Programme content & resource persons	RP with FP, SV	Preliminary meeting in Acre with SV. RP and FP to follow up
Pre-meeting discussion (Discuss final agenda, confirm steps and responsibilities)	Core team: RP, JU, ML, FP, CR with EM and PD.	27th May
Opening & closing sessions	RP with JU, FP	Agree on 27th
Local Transport / Travel		
Local travel for facilitators and resource persons	SD to arrange air tickets: Lima- Maldonado-Lima	Done
Travel / Medical insurance	No medical insurance provided	-
Local transport for participants & resource persons	Reimbursable upon presentation of receipts	RP/FP to provide with receipts
Meeting arrangements		
Venue booking	FP	Early May. University classrooms for free
Rooms and facilities Bookings (big rooms + smaller rooms) Equipment & supplies (1 LCD projector; 2 big white boards to write in, 4 small boards to hold paper) Decoration?	FP	To be determined after curricula is developed
Catering: Water in classrooms Lunches Coffee breaks	FP/Ms. Anita	Lunches will be hot lunches and distributed directly by provider
Name tags	FP	Empty name tags (30) for 28th May
Stationery (usual set participants and training rooms)	FP/Ms. Anita	RP to indicate needs
Claim forms and per diem payments	FP/RP	Forms ready on 25th May. Payments on 29th May

ACTIVITY	PERSON RESPONSIBLE	BY WHEN/COMMENTS
Materials Collect – collate Copying Binding (binders) Distribution	RP/FP	All ready by 25th May
Certificates of participation	RP/FP/JU	Include organizers' logos
Welcome letter + practical info	RP/FP	
Special social events		
None		
DURING THE MEETING		
Registration desk set up (binders, forms, name tags)	FP/RP	28th May
Administrative services (communications, typing, photocopying)	FP/Ms Anita	Services available inside the university
Group picture	CR: digital picture	Participants holding workshop certificates. Don't forget to take camera!!! 29th May
Course evaluation Form development Distribution & collection Analysis	CR, RP, FP– use final evaluation course form	
AFTER THE MEETING		
Debriefing of core team	Core team: RP, JU, FP, CR, PD – use final evaluation course form	29th May evening
Next steps	Core team: RP, JU, FP, CR - use final evaluation course form	Via email and phone calls and face to face with SV

Annex 2: Budget Worksheet

Following is a worksheet to help with budgeting for an exercise. It is advisable to perform the exercise in the community in order to improve participation and control costs. If planning the exercise in the community, many of these expenses will not apply. Try to be as complete as possible. Include even items provided at no cost, such as staff time, to know the real cost of the exercise.

Description	Cost/unit	Units	Total			
Core team staff time	U\$/day	X days	US\$			
Coordinator						
Content leader						
Main facilitator						
Secondary facilitators						
Logistics planner						
Note taker						
Travel and/or local transport	U\$/person	X persons	US\$			
Local transport						
On-route expenses (meals, taxis, etc.)						
Air travel main facilitator						
Taxes, visas, etc.						
Accommodation	U\$/person	X persons	US\$			
Accommodation participants						
Accommodation core team						

Description	Cost/unit	Units	Total
Accommodation external guests			
Food and refreshments	U\$/person	X persons	US\$
Tea breaks x 4			
Lunch x 2 days			
Dinner x 1 day			
Event location	US\$	X	US\$
Rental of venue			
Materials	US\$	X	US\$
Stationery and supplies (paper, pens, color markers, binders, etc.)			
Rental of data show (if used)			
Dissemination and follow up activities	US\$	X	US\$
Meeting to present results back to community			
Preparing reports in graphic format			
Visit to local radio			
Meeting with local government authorities			
Distribution of reports			
Sub-total 1			
Administrative costs (10-30% of sub-total)	US\$		
Sub-total 2 (Sub-total 1 + Administrative costs)	US\$		
		Contingency (2.5-5%) of subtotal 2	
		Total US\$	

Annex 3: Sample Agenda

"Exploring the Future of Madre de Dios". 28 - 29 May 2005. Universidad Nacional de Madre de Dios Puerto Maldonado, Madre de Dios, Peru.

Objectives of the meeting:

- To present the Scenarios methodology as a tool for group planning.
- To stimulate reflection on the future of Madre de Dios, particularly with regard to the impact of the Brazil-Peru highway.
- To gather new information about the history of Madre de Dios and the projects that are taking place in relation to the future of the Department.

Note-taker: Carlos Rivadeneyra Olcese; Facilitators: Rocio Prieto, Francis Patiño, Julio Ugarte, Elsa Mendoza.

Agenda

Saturday 28th May	
9:00-9:30	Registration (Rocio Prieto and Francis Patiño)
	Welcome and introductions
9:30-10:30	Pair wise introductions: Yesterday, today and tomorrow of Madre de Dios (Moderator: Francis Patiño)
10:30-11:00	Welcome and workshop objectives: (Rocio Prieto and Julio Ugarte)- Roadmap of meeting and working agreements - Logistics announcements
11:00-11:20	Coffee break
11:20-11:50	Madre de Dios' past (Juan Carlos Arzola, artist)
11:50-12:00	Questions and answers about Madre de Dios
	Uncertainties and focal questions
12:00-12:10	Main players in the history of Madre de Dios (Group work & Facilitators)

Continued >>

Saturday 28th May					
12:10-12:30	Current problems in Madre de Dios (Group work & Facilitators)				
12:30-1:00	Concerns about the future of Madre de Dios. Focal questions (Group work & Facilitators)				
1:00-2:00	¶©∮ Lunch break				
	Building scenarios for Madre de Dios				
2:00-2:30	Identifying the factors of change and the main uncertainties (Group work & Facilitators)				
2:30-4:30	Developing scenarios storylines (Group work & Facilitators)				
4:30-5:00	Synthesis of the day and agenda for next day (Rocio Prieto)				
Sunday 29th November					
8:30-9:00	Energizer and review of roadmap and agenda (Rocio Prieto)				
9:00-10:30	Finalizing scenarios storylines (Group work)				
10:30-11:00	Presentation of scenarios by participants (groups 1 & 2) plus questions and answers				
11:00-11:20	Coffee break				
11:20-11:50	Presentation of scenarios by participants con't (groups 1 & 2) plus questions and answers				
11:50-12:50	Presentation of scenarios by participants (groups 3 & 4) plus questions and answers				
12:50-1:00	Where we are and where we are going (Review of roadmap) (Rocio Prieto)				
1:00-2:00	¶© ¶ Lunch break				
2:00-2:30	Previous scenarios work done in Madre de Dios (Elsa Mendoza) plus questions and answers				
2:30-3:00	What are scenarios? (Rocio Prieto)				
3:00-3:30	Meeting evaluation (Participants)				
3:30-4:00	Final remarks and distribution of certificates (Facilitators)				
4:00-4:30	Group picture and farewell				

Annex 4: Example of Final Evaluation Form

Following is an evaluation form that was used in a scenarios event. This form could be adapted for non-literate groups by discussing these questions in small groups or by using symbols instead of writing.

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Review the following meeting objectives and indicate how well you think these were achieved on a scale of 0 (not at all) to 10 (fully achieved):

1. OBJECTIVE: To present the Scenarios methodology as a tool for group planning.										
0	1	2	3	4	5	6	7	8	9	10
2. OBJECTIVE: To stimulate reflection on the future of Madre de Dios, particularly with regards to the impact of the Brazil-Peru highway.										
0	1	2	3	4	5	6	7	8	9	10
3. OBJECTIVE: To learn something new about the history of Madre de Dios and the projects that are taking place in relation to the future of the region.										
0	1	2	3	4	5	6	7	8	9	10
4. What	do you	consider t	o be the	BEST feat	tures of th	e meeting	g?			
5. What	do you	consider t	he WORS	ST feature	s of this n	neetina?				

(Use additional sheets of paper for any other comments you may have)

7. If you could change anything about this meeting, what would it be?

6. Do you think that the methods will prove useful? Why?

THANK YOU FOR YOUR COMMENTS

7. Glossary

The following are new terms or terms used in a new way in the field quide.

Brainstorm – an idea-generation activity where participants rapidly suggest ideas on a certain topic, organize them by theme and finally analyze them.

Core team – the group of people that plans and conducts exercises with a community. The core team is composed of the coordinator, content leader, facilitators, logistics, and administrative support.

Driving force – key factor or change that might have a significant impact on a community. A driving force can either be either certain or uncertain, and it may be under the control of the community or not.

Exercise – an event or series of participatory activities. An exercise ideally continues beyond the scheduled activities by creating awareness and motivating change.

Forecast - an estimate of what is likely to happen in the future at a specific point in time.

Icebreaker - a fun, often physical group activity that introduces participants and makes people feel more comfortable.

Insider – a person or organization that is directly affected by an issue or decision; in contrast to an "outsider" who is only indirectly affected by an issue.

Local knowledge – understanding and perspectives held by local people on a subject, obtained by experience, association and oral or written tradition

Matrix - a square diagram with rows and columns used as a method to classify groups according to their importance and influence with respect to a certain topic.

Mental map – a way of thinking; a world view based both upon past experiences and assumptions about the future.

Modeling - the process of building abstract representations of physical, biological or social processes with a set of variables and relationships between the variables in order to test a theory.

Monitoring - evaluating something regularly in order to track how it changes; a continuous evaluation process that tracks opinions and provides feedback for positive change.

Outsider - a person or organization which is only indirectly affected by an issue or decision, but may influence it; in contrast to an "insider" who is directly affected.

Projection – a method to forecast the future based on current trends. Projections are usually more analytical than creative, predicting a single expected outcome of a current trend or a range of statistical possibilities. Also known as Trend Analysis.

Pathways – a method for reaching a goal in the future by devising specific strategies and action plans.

Scenarios – a method for developing plausible stories about the future, each of which might happen under particular assumptions.

Stakeholder – a person or organization which has an interest in or influence on an issue or decision. In the case of communities and natural resources, stakeholders may include smallholder farmers, teachers, local business owners, politicians, industry representatives, non-governmental organizations, and policy makers at different levels.

Surprise – an occurrence that is unexpected and very unlikely to occur, but possible.

Uncertain driving force – a factor or influence that can impact a community, but the likelihood of it occurring is unknown, and its trajectory and impact are unclear.

Venn diagram – a participatory method of using overlapping shapes, such as circles, to demonstrate the relationships and influences of stakeholder groups.

Visioning – a method by which participants visualize a single ideal future together.

Workshop – a place or meeting where people discuss, study, experiment or perform practical work in a subject or activity.

Today communities find themselves in the midst of myriad changes: social, political, economic and environmental forces are transforming their worlds quickly. These forces are complex and often interact in unpredictable ways. Planning for the future in the midst of such change and uncertainty is daunting.

"Field Guide to the Future" is for communities who depend on natural resources and all of us who work with them. The purpose of this field guide is to make thinking about the future easy and empowering.

In a practical step-by-step approach the authors describe four methods—Scenarios, Visioning, Pathways and Projections—that can help communities think ahead and prepare for changes in their environment and natural resources. The guide has been written in straightforward language and organized as a teaching tool to facilitate the use of the methods without additional training.

"Field Guide to the Future" is the latest in a series of books describing methods to help communities think ahead and plan. In the preparation of this field guide, the authors collaborated with communities in many parts of the world, particularly in tropical forest margins. They wanted to share their experiences and the lessons they have learned about methods that can help other communities prepare for the future.

"Field Guide to the Future" is a collaborative effort between the Center for International Forestry Research (CIFOR), the ASB-Partnership for the Tropical Forest Margins, a system-wide program of the Consultative Group on International Agricultural Research (CGIAR), the World Agroforestry Centre (ICRAF) and the Secretariat of the Millennium Ecosystem Assessment (MA).

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