

8

GREEN
GUIDE TO

LIVELIHOODS

TRAINER'S GUIDE

MODULE 8: GREEN GUIDE TO LIVELIHOODS

TRAINER'S GUIDE

Table of Contents

Introduction	1
Overall Learning Objectives for a One-Day Workshop	1
Before the Workshop.....	1
Agenda.....	1
Workshop Supplies	1
Content Paper and Handouts	1
Electronic Copies of Materials	2
Participant Experiences	2
Local Expertise	3
Adapting Materials to the Audience	3
Slide Animation	3
Day Before the Workshop	3
Small-Group Formation	3
Workshop Materials.....	4
Handouts.....	4
Resource Materials on CD	4
Workshop Plan Overview.....	5
Plan for Session 1: Introduction and Overview; Livelihoods, Disasters, and Ecosystems	6
Registration and Greetings	7
Activity 1.1 Introductions	7
Activity 1.2 Workshop Purpose, Expectations, and Ground Rules.....	8
Activity 1.3 Sustainable Livelihoods.....	8
Activity 1.4 Group Exercise: Livelihoods, Disasters, and Ecosystems.....	11
Plan for Session 2: Ecosystems and Livelihood Recovery.....	15
Activity 2.1 Ecosystems and Livelihood Recovery	15

Table of Contents (continued)

Activity 2.2 Ecological Analysis of Livelihoods Case Studies.....	16
Plan for Session 3: Sustainable Livelihood Project Design Considerations; Evaluation and Closing	18
Activity 3.1 Debrief of Activity 2.2 Ecological Analysis of Livelihoods Case Studies	19
Activity 3.2 Special Considerations in Project Design.....	19
Activity 3.3 Design of Sustainable Livelihood Recovery Project.....	21
Activity 3.4 Group Reports.....	21
Activity 3.5 Evaluation	22
Activity 3.6 Closing.....	22
Annex: Activity 2.2. Answer Guide: Case Study Discussion Questions 1 & 2.....	23

INTRODUCTION

This **Trainer's Guide** provides the information, suggested content, activities, and support materials needed for facilitation of a one-day workshop. This workshop was developed as part of the Green Recovery and Reconstruction Toolkit (GRRT) under the Humanitarian Partnership program between the World Wildlife Fund and American Red Cross Tsunami Recovery Program.

The one-day workshop covered in this guide is designed as a standalone event, but can be combined with other GRRT training materials to create a multiday workshop. When combined with other GRRT workshops, the opening session should be modified to reflect the subject matter of the combined workshop materials.

Overall Learning Objectives for a One-Day Workshop

By the end of this workshop, participants will be able to:

1. Explain how livelihoods, disaster recovery, risk reduction, and ecosystems are linked.
2. Identify the recurring environmental impacts of typical livelihoods interventions.
3. Understand and address solutions for sector-specific livelihoods challenges, and be able to identify sources of expertise to improve livelihoods project outcomes

BEFORE THE WORKSHOP

As part of your workshop preparation, you will need to review each of the points below and decide how each one will be addressed. You may need to coordinate some of these issues with the workshop sponsor, host, lead facilitator, and/or the manager at the workshop venue.

Agenda

Update the agenda to incorporate changes in the workshop. A template for the agenda can be found in the electronic file of the workshop materials.

Prepare sufficient copies of the agenda for all participants.

Workshop Supplies

Ensure that each participant has sufficient pens, paper, and other materials and that there are sufficient flip charts and marking pens for the workshop exercises. See guidelines for other supplies in *Module A, Toolkit Guide*.

Content Paper and Handouts

It is expected that the content paper for this module will be provided to the participants at the beginning of the workshop. The paper contains a number of references that will be used during the workshop.

The trainer should decide in advance of the workshop whether the participants will receive the following:

- A separate workshop workbook (e.g., ring binder) or a folder for holding handouts
- Thumbnail copies of the PowerPoint presentations. Note that the answers to many of the questions posed are given on the slides.

Electronic Copies of Materials

Each of the Green Recovery and Reconstruction Toolkit training modules includes a CD with the files of the content paper, trainer's guide, PowerPoint presentation, and other workshop materials and reference materials.

Electronic copies of all the module materials will also be available for downloading from an Internet site. The trainer needs to confirm the site address and provide it to the participants together with the handouts.

Participant Experiences

For some of the GRRT workshops, the agenda provides 15 – 30 minutes for participants to give brief presentations of their experiences in post-disaster recovery and reconstruction related to the workshop's theme. **If at all possible, the selection of individuals to make presentations should take place before the training.** If a training needs assessment or survey is undertaken before the workshop, this would be an ideal time to ask participants if they would like to present their experiences.

These presentations, typically about seven minutes long, should focus on practical challenges that the presenter faced when dealing with environmental issues, either positively or negatively, and should be related to this workshop topic. The presenters should be encouraged to link their presentations to one or more environmental issues. A basic format for the presentation is as follows:

- Describe the context of the project or activity.
- Summarize the problem/issue encountered.
- Indicate how the issue was related to the environment.
- Explain any solutions found or that could be identified in retrospect, especially in terms of how the well-being of the affected population was impacted by the project or activity.

The presentations can focus on positive as well as negative environmental impacts arising from the relevant activities. For practical reasons, each presenter should use no more than four PowerPoint slides. (The use of flip charts or other presentation tools rather than slides should be encouraged.)

While the time allocated for the Participant Experience sessions is relatively long given the overall time for training, this session is an excellent opportunity to identify environment-related lessons and to solicit participant's thoughts on how they encountered and addressed environmental issues in their work.

If a Participant Experience session cannot be organized, the following sessions in the agenda should be moved forward and their increased.

Local Expertise

Perhaps as important as providing an opportunity for participants to share their experience is the value of inviting topic experts from the region to attend the workshop as resource persons. One or two individuals who have knowledge of the workshop topic, experience with the issues discussed in the workshop, and, most important, understand how these issues apply to the local context, can offer invaluable contributions to the workshop. "Local context" includes an understanding of the implications of applying this knowledge and experience to post-disaster/conflict situations. In the case of this workshop, experts in micro-finance or income-generation projects would be helpful.

Adapting Materials to the Audience

The trainer's guide and materials are designed to have as universal an application as is practical. However, some trainers may feel that the workshop will be more effective if some of the examples, case studies, or other details are adapted to match the specific training needs and interests of the local audience. If so, trainers are encouraged to make those adaptations. (Adaptations that might apply to this module would relate to priority livelihood activities common in the region where the workshop is held, especially those with high degree of utilization of natural resources.)

Slide Animation

Slide animation (i.e., the need to "click" to make materials appear) is engaged for many slides. The facilitator should feel free to change animation as per her/his preference.

Day Before the Workshop

Make sure the data projector, computer, screen, extension cords, flip charts, markers, and all the participants' supplies are in place. Do a test run of all your PowerPoint files to make sure all animation is working properly and changes to the files have been made as needed to tailor the content to your audience. Confirm that all printed materials have been copied and are ready to be handed out. For additional workshop planning tips, see *Module A, Toolkit Guide*.

Small-Group Formation

A significant part of the workshop is devoted to group activities. The formation of these groups is an important consideration. You will need to balance the number of participants in the workshop with the mechanics and learning objectives for each group activity.

It is generally recommended that participants sit at large tables in groups of four to six. Whenever practical you may simply form the workgroup based on those table groupings. However, note that some activities specify either an exact number of groups or an exact number of participants in each group. You will need to anticipate this range of circumstances and be prepared to assign participants to groups in order to achieve the activities' objectives.

An additional consideration may be the desire for groups to reflect the diversity of the participants, i.e., each group would incorporate gender balance and a proportionate representation of humanitarian workers with conservation/environmental workers, government and/or private-sector workers, and expatriate and national

staff where appropriate. Similarly, you might want to balance people who have a lot of relevant experience with those who are newcomers to the field. The main concern is that each group has the combined skills necessary to complete the assigned activity.

It is up to you to decide whether to change group membership during the workshop. However, keeping workgroups together might be most productive for such a short workshop, since this would allow for the progressive development of intragroup relations and mutual capacities. For multiday workshops, we recommend placing different individuals in the groups each day. One way to do this is to place each participant's name card (or table tent) in the location of your choosing at the start of each workshop.

WORKSHOP MATERIALS

The following materials need to be assembled and adequate copies made before the workshop begins. All of the materials for this workshop are on the CD for this module. The facilitator's materials and handouts are in the file that includes the phrase "Workshop Materials" as well as additional instructions for photocopying.

Handouts

Session 1	Module 8 Green Guide to Livelihoods content paper Workshop Agenda 8.1.1 Green Recovery and Reconstruction Toolkit
Session 2	8.2.1 Case Studies
Session 3	8.3.1 Sustainable Livelihood Project Design 8.3.2 Workshop evaluation form Certificates Workshop resource CD

Resource Materials on CD

In addition to the above materials, some documents may have been included on the CD that have been identified as particularly useful to both workshop facilitators and participants. For this workshop, those documents include the following:

- All files for Module 8: content paper, trainer's guide, workshop materials, PowerPoints
- FAO and ILO. 2009. *Disaster Livelihood Assessment Toolkit: Analysing and responding to the impact of disasters on the livelihoods of people.*
- Pallen, D. 1997. *The Environmental Sourcebook for Micro-Finance Institutions (MFIs). Canadian International Development Agency-Asia Branch.*
- WWF. *Environmental Stewardship Review for Humanitarian Aid.*

WORKSHOP PLAN OVERVIEW				
TIMES	ACTIVITY	METHODOLOGY	RESPONSIBLE	TIMING
SESSION 1: INTRODUCTION AND OVERVIEW, LIVELIHOODS, DISASTERS, AND ECOSYSTEMS				
8:30 – 9:00	Registration, Greetings	Participants register, collect materials and name badge		30'
9:00 – 10:40	1.1 Introductions	Welcome, introductions		30'
	1.2 Workshop Purpose, Expectations and Ground Rules	Presentation		15'
	1.3 Sustainable Livelihoods	Presentation		20'
	1.4 Livelihoods, Disasters, and Ecosystems	Group exercise		35'
10:40 – 11:00	Break			20'
SESSION 2: ECOSYSTEMS AND LIVELIHOOD RECOVERY				
11:00 – 12:30	2.1 Ecosystems and Livelihood Recovery	Presentation/discussion		40'
	2.2 Ecological Analysis of Livelihoods Case Studies	Group work		50'
12:30 – 1:30	Lunch			60'
SESSION 3: SUSTAINABLE LIVELIHOOD PROJECT DESIGN CONSIDERATIONS				
1:30 – 4:10	3.1 Debrief of Activity 2.2 Ecological Analysis of Livelihoods Case Studies	Group reports/wrap-up presentation		30'
	3.2 Special Considerations in Project Design	Lecture and audience participation		30'
	3.3 Design of Sustainable Livelihoods Recovery Project	Group work. Break taken during group work		100'
4:10 – 4:55	3.4 Group Reports	Group presentation to plenary		45'
4:55 – 5:15	3.5 Evaluations	Participant complete evaluations		15'
	3.6 Closing	Closing remarks by workshop host and facilitator		5'
5:15	Adjourn			

PLAN FOR SESSION 1: INTRODUCTION AND OVERVIEW; LIVELIHOODS, DISASTERS, AND ECOSYSTEMS	
SESSION TIME	100' + 30' for registration
OBJECTIVES	<p>By the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> • Describe the workshop objectives. • Summarize the main features of the sustainable livelihoods framework and describe the five livelihood asset categories. • Describe how disasters and livelihoods can adversely impact ecosystems. • Explain how ecosystems support sustainable livelihoods and disaster-resilient communities.
ESSENTIAL CONTENT	<ul style="list-style-type: none"> • The facilitator introduces the workshop objectives and participants introduce each other. • This session establishes the links among disasters, livelihoods, and the ecosystems. It is important to review the primary theoretical framework used to guide livelihoods programming and to identify the links and entry points for ecological concerns. The sustainable livelihoods approach (SLA) framework helps us understand the link between people's assets and their livelihood options, motivations, and strategies.
OUTPUTS	<ul style="list-style-type: none"> • Participant expectations will be written on large index cards. • By the end of the session, participants will produce a set of flip charts with responses to their group's assigned questions.
PREPARATION	<ul style="list-style-type: none"> • Create signs directing participants to workshop room if necessary. • Create a welcome sign with name of workshop. • Adapt the PowerPoint slides to the region, if necessary. • As participants register, give them a card and ask them to review the workshop agenda and write down one thing they would like to learn or take from this workshop. These cards should be categorized and posted on a flip chart for later comment during the presentation.
RESOURCES	<ul style="list-style-type: none"> • Data projector and screen • Flip charts and markers • Name badges and table tent cards • Post-it notes, large index cards
HANDOUTS	<ul style="list-style-type: none"> • Module 8 Green Guide to Livelihoods content paper • Workshop agenda • 8.1.1 Green Recovery and Reconstruction Toolkit

FACILITATOR NOTE

- Determine well in advance of the workshop what the local customs and expectations are for opening the workshop. In some locations, customs require government participation and traditional ceremonies. Make sure the appropriate people are invited, on the one hand, but endeavor to make their involvement as brief as practical. Prepare suggested opening comments for a guest speaker, if appropriate. Otherwise, or in addition, invite the workshop host to officially open the workshop, welcome the participants, and comment on the reason the workshop is being held.
- If the opening ceremony requires more than the time shown in this trainer's guide, then the daily schedule will need to be modified.
- The facilitator should be familiar with the sustainable livelihoods approach and the links among disasters, livelihoods, and ecosystems. He or she should be prepared to share a couple of examples to illustrate these links. He or she can gain this familiarity by reading the content paper and the listed references at the end of the content paper.

Registration and Greetings

(30 minutes)

It is important to show the workshop agenda starting at least 30 minutes before the actual beginning of the formal welcome and opening remarks. Otherwise, too many participants will show up a few minutes late, then register, collect their materials, and greet old friends before they take their seats and prepare to start the workshop.

Activity 1.1 Introductions

(30 minutes)

Slide # 1, Session 1. The workshop host should welcome the participants and introduce the training team, including any person offering administrative or technical support. This should be an upbeat and inspirational welcome in which the host explains the importance of this workshop in the context of appropriate responses to disasters and conflict that are also environmentally sustainable.

Slide # 2, Paired Introductions. Ask the participants to pair up as part of the process of learning something about each other. Ask participants to briefly introduce themselves to their partners, closely following the questions shown on the slide. After two minutes, tell the participants to switch roles and have the second partner answer the questions for the first. After two more minutes, have each participant introduce his or her partner. It is critical to keep on time at this point. You may set a rule that each introduction can last no more than 30 or 40 seconds.

When all introductions have been made, comment on the diverse backgrounds and experience in the room and how this diversity will enrich the overall learning experience.

Ask participants to write the name they want to be called on their nametags and on the table tent cards, using large felt-tip pens. Ask them also to review the participants list and notify the administrative assistant of any corrections needed.

Activity 1.2 Workshop Purpose, Expectations, and Ground Rules

(15 minutes)

Slide # 3, Ground Rules. Propose the workshop ground rules listed on this slide as those to be followed during the workshop. Explain that the rules will help to maintain a positive and collaborative learning environment. Ask if they have any questions about the ground rules or if they would like to add any others.

If anyone disagrees with the ground rules, he or she should explain the objection. Assuming no one objects, suggest that this implies agreement. If someone objects, listen to him or her and make any modifications necessary.

Slide # 4, Green Recovery and Reconstruction Toolkit. It should be helpful to place this workshop within the context of the overall GRRT training project. Discuss the bullet points on the first slide: The Green Recovery and Reconstruction training toolkit was developed by WWF and the American Red Cross. It is based on an innovative, five-year partnership between WWF and the American Red Cross that was formed after the 2004 Indian Ocean tsunami and designed to integrate environmental sustainability into American Red Cross's recovery and reconstruction processes in Indonesia, Sri Lanka, Thailand, and Maldives.

Slide # 5, 10 Program Modules. Name the other modules from the second slide. Point out that most participants who attend the Module 8 workshop would also benefit from attending the Modules 1 – 3 workshops.

Hand out the 8.1.1 Green Recovery and Reconstruction Toolkit document at the end of the presentation, indicating it contains additional information. (If all of the participants have previously taken another GRRT module and if they received this handout at that workshop, it will not be necessary to hand it out again during this workshop.)

Slide # 6, GRRT Principles. These six principles have guided the development of the GRRT modules and are foundational to the successful implementation of green recovery and reconstruction.

Slides # 7, Training Purpose and Specific Workshop Objectives. Present the workshop purpose.

Slide # 8, Workshop Agenda. Hand out the agenda for the day to the participants (if it wasn't already given to them at the registration). Review it aloud with the group. Ask if there are any questions about the workshop objectives or the agenda.

Slide # 9, Any Questions? Ask if there are any questions. Inform participants that this concludes the introduction to the workshop and that you will now begin discussing the substantive information about livelihoods.

Activity 1.3 Sustainable Livelihoods

(20 minutes)

Slide # 10, What are Livelihoods? Explain that promotion of ecological and natural resource management-based livelihood recovery requires that one understand the links among livelihoods, vulnerability to disasters, and ecosystems.

Explain that after a brief review of the concept of livelihoods and the sustainable livelihoods framework, they will work in groups to discuss these links.

Engage participants by asking them the following question: "When you hear the concept 'livelihoods,' what other terms come to mind?"

Write their responses on the flip chart. Explain that simply put, livelihoods refer to capabilities, assets, and activities that are required for people to make a living. Suggest that many factors influence people's livelihood options and strategies.

Now ask participants, "What are these factors and influences?" Write these on another flip chart under the title "Factors influencing livelihoods."

Slide # 11, What is an Ecosystem? The previous discussion will, presumably, make some reference to the environment or natural resources. Inform participants that you will discuss these issues in the framework of an "ecosystem." It will be helpful to many to discuss the term, as some participants may be unfamiliar with it. Ask for someone to suggest a definition, discuss the answer, and then show the definition used in the GRRT training modules:

A dynamic complex of plant, animal, and microorganism communities and their nonliving environment interacting as a functional unit.

Inform participants that we will discuss the concept of ecosystems in greater depth in the next session.

Slides # 12 – 13, The Sustainable Livelihoods Framework. Show the sustainable livelihoods (SL) framework graphic on this slide. Explain that this is the standard DFID SL framework depicting the five factors that interact dynamically to influence livelihoods.

If one is interested in reestablishing or preserving the ecosystem, which is considered a natural asset (e.g., land, forests, mangroves, animals, etc.), one needs to understand the dynamic interrelation of natural capital to these other assets, and to people's wider vulnerability context, structures, institutions and processes, livelihood strategies, and desired livelihood outcomes.

Briefly introduce each of these factors before presenting the asset pentagon (Slide #14) in more detail.

Slide # 13 animates each of the following points in order.

- All people have assets to some degree. These assets refer to tangible and intangible capacities or resources people can access and use to derive their livelihood. Explain that you will present these in more detail after explaining the other components in the framework.
- People's livelihoods are vulnerable to external shocks and stresses. The three main categories of vulnerability are trends (economic trends, technological trends), shocks (conflict, earthquake, financial crisis), and seasonality (seasonal fluctuations in price or production). Shocks and stresses affect people's assets, the depletion of which further increases vulnerability. Earthquakes can destroy bridges and people's homes, and that can deplete the asset base.
- International, national, regional, and local policies; institutions; and processes shape people's access to livelihood assets and opportunities. To understand how policies, institutions, and processes affect natural resource management, consider how they might influence forests. The public sector's ability to make and enforce legislation impacts people's access to and use of forests. Similarly, the existence (or nonexistence) of local natural resource management

organizations influences forestry use legislation and enforcement. The existence (or nonexistence) of markets for forest products influences the types of livelihood options that people and communities might pursue. Culture also influences forestry use depending on what value and symbolism people and their communities ascribe to forests. In post-disaster situations, land tenure and land use policies can be instrumental in increasing or reducing people's vulnerability to disasters.

- People also have different strategies they implement in pursuit of their livelihood goals and priorities (these include productive activities and investment strategies). These strategies are dynamic and multifaceted. For example, in farming households, activities are not necessarily confined to agriculture but often include non-farm activities that diversify income and help meet household needs. Migration, whether seasonal or permanent, is one common livelihood strategy.
- In emergencies, certain livelihood strategies may no longer be possible, while others will need to be increased to compensate. New strategies are adopted in response to food insecurity. The initial strategies adopted are generally those that are not damaging to livelihoods, such as migration for work, collection of wild foods, etc. As more people adopt the same strategies, however, or options become more limited (e.g., as a result of war), strategies become more damaging on both livelihoods and dignity. In political or conflict-related emergencies, options may include engaging in violent, illegal, unsafe, or degrading activities.¹
- People's livelihood strategies are directed toward their desired livelihood outcomes (examples include increased income, improved food security, better future for their children, and sustainable use of natural resources).

Invite participants with knowledge of the SL framework to clarify any points they deem necessary before elaborating on the content of the asset pentagon.

Slide # 14, Livelihood Asset Pentagon. Explain how assets are especially important because the resilience of people's livelihoods is largely determined by the resources or assets available to them and how these have been affected by disaster. Households with many livelihood assets are generally more *resilient* (able to withstand shocks) than are households with fewer assets. Thus, resilient *farming households* have sufficient savings to buy food when crops fail; *small traders* have sufficient cash to buy new stocks of raw materials after a disaster has destroyed their previous stock; *pastoralists* can afford to lose or sell a few animals and still have enough to build up their herds again after the emergency passes.²

In natural disasters, people with a greater asset base are often less vulnerable and able to recover more quickly. Emergencies have varying impacts on assets, which may be lost, destroyed, or sold. In complex emergencies, people's assets themselves can be transformed into life-threatening liabilities as other groups try to gain control over these assets.

1 Jaspars, Susan. 2006. *What is Livelihoods Programming? Field Exchange Special Supplement 3*.

2 FAO and ILO. 2009. *Disaster Livelihood Assessment Toolkit: Analysing and responding to the impact of disasters on the livelihoods of people*.

Show the “asset pentagon” graphic and present the five categories of assets.³ This asset pentagon is concerned with the strengths or resources people can access and use to derive a livelihood. It is not just ownership/possession of assets but also the ability to access assets in the broadest sense (e.g., borrowing). Proceed with slides # 15 – 19 to provide more detail on each of these asset categories.

Slides # 15 – 19, Assets. Before presenting examples of each asset type, invite participants to brainstorm or give examples of each of the following:

- Human assets: skills, knowledge, health, and ability to work
- Natural assets: natural resources such as land, soil, water, forests, animals, and fisheries
- Financial assets: financial resources including savings, credit, and income from employment, trade, and remittances
- Physical assets: basic infrastructure, such as roads, water and sanitation, schools, and ICT, and producer goods, including tools and equipment
- Social assets: social resources, including informal networks, membership of formalized groups, and relationships of trust that facilitate cooperation

Slide # 20, So...Landless Agricultural Household. Asset pentagons can be used to illustrate the asset mix that individuals, households, groups, and/or communities have or can access. Present the “asset pentagon” example of the “landless agricultural household.” In this case, our analysis of this household’s assets would lead us to conclude that it has a very restricted asset pentagon.

Slide # 21, Asset Pentagons Differ for Different Groups. The shape of each asset pentagon will differ depending on the group and its assets (or vulnerabilities). Present the graphic, which illustrates three asset pentagons for three distinct groups of agricultural stakeholders: one for farmers reliant on family labor/hand power, one for farmers who own draught power, and one for farmers who possess tractors.

In conclusion, the asset pentagon can help project managers analyze the relationship of natural capital (natural resources/ecosystems) to other assets and understand its importance in an overall livelihood strategy. It is also useful to compare the assets of different groups or communities affected by projects.

Livelihood recovery projects aiming to preserve or reestablish natural assets (e.g., forests, ecosystems) need to consider these natural assets alongside other assets and in the broader dynamic that influences people’s livelihoods.

Activity 1.4 Group Exercise: Livelihoods, Disasters, and Ecosystems

(35 minutes)

Inform participants that you will undertake a discussion as a way to explore the links among livelihoods, disasters, and the ecosystem.

Slide # 22, Group Discussion. Assign each question to a different group of participants. Give them 15 minutes to discuss their assigned question. They should write their responses on flip-chart paper. Each group should identify one or two specific examples to support or illustrate their response.

³ Subsequent to the original DFID model, other categories of capital and assets have been identified, including people’s political capital (i.e., their power and capacity to influence decisions).

1. What are the potential impacts of natural disasters and conflicts on natural assets (and on ecosystems)?
2. How does using up (or preserving) natural assets (or ecosystems) increase (or reduce) people's vulnerability to disaster shocks?
3. How do the SL framework and the asset pentagon help or hurt project managers interested in promoting ecological or environmentally friendly livelihoods projects?

Allow up to 10 minutes for small-group discussion.

Slide # 23, What are the Potential Impacts of Natural Disasters... Show Question # 1 and ask the group(s) assigned that question to report their response. Present the following examples if they significantly complement the groups' presentation (otherwise go on to the next slide):

- Natural disasters and conflict can destroy natural assets (and ecosystems), and that can further limit people's livelihood options (and may increase extraction activities) and increases their vulnerability to disasters.
- For example:
 - Flooding can destroy crops or render agricultural land infertile due to salination.
 - Land mines limit access to productive land (e.g., Afghanistan, Liberia) and may maim livestock or wild animals.

IMPACTS OF TSUNAMI ON RURAL COASTAL COMMUNITIES (2004)

The impact of the December 2004 Asian tsunami, for example, on rural coastal communities in India, Indonesia, Sri Lanka, and Thailand, was disproportionately strong in poor fishing and aquaculture households in comparison with those of other groups of people in the region. It is estimated that the livelihoods of up to 2.5 million people in fishing and aquaculture households were affected. The fishing and aquaculture households in the rural coastal communities made up an estimated one-quarter of all fatalities. Rural coastal communities in the four countries generally have a higher percentage of people living below the poverty line than is the national average. The high dependence on natural resources makes these communities particularly vulnerable to changes in resource condition.

Source: Pomeroy, Robert, Blake Ratner, Stephen Hall, Jate Pimoljinda, and V. Vivekanandan. 2006. Coping with disaster: Rehabilitating coastal livelihoods and communities. *Marine Policy* 30: 786-793.

IMPACTS OF LAND MINES ON ECOSYSTEMS

Land mines, for example, in places like Bosnia, Afghanistan, Liberia, or Mozambique, severely limit access to land, both during the conflict and in the post-conflict setting. Land mines are also associated with habitat degradation, reduced access to water points and other vital sources, species loss, alteration of the natural food chain, and additional pressures on biodiversity. Land mines in national parks undermine the tourist trade, and can maim or kill wildlife. For example, in Angola, thousands of animals including antelopes and elephants have been victims of land mines.

Slide # 24, "Vulnerability" Context. This slide provides an animated illustration of how disasters adversely affect people's assets (including natural assets), and how these effects can increase their vulnerability. For example, floods can kill or injure people, damage physical assets, and destroy forests (a natural asset) – altering and decreasing a household's asset pentagon. As a result, the household is more vulnerable to future disasters.

Slide # 25, How Does Using Up (or preserving) Natural Assets... Show Question # 2 and ask the group(s) assigned that question to report their response. If the discussion would benefit from other examples, you might note the following:

- Ecosystems such as coral reefs, mangroves and other wetlands, and mountain forests, in addition to supporting people's day-to-day livelihoods, provide a protective function and are important in mitigating the impact of natural hazards.

For example, the removal of mangrove forests for tourism and shrimp farming activities in Asia substantially reduced coastal protection from the 2004 Indian Ocean tsunami. Conversely, damage from the Pakistan and Kashmir earthquake was less severe in the northern regions where tracts of forest that had been left in place prevented landslides. These ecosystems also provide access to water, food, and medicinal supplies that are critical during the recovery process, as well as a means to create sustainable incomes. (Women often depend on these ecosystems for their well-being – including food security.) Reconstruction efforts that do not adequately address the local environment and take these services into account (e.g., by filling in wetlands or razing forests for materials) could ultimately do more long-term harm than good for devastated communities.

Slide # 26, Disaster, Livelihood, Ecosystem Links. If they don't have an example, you can show this slide and share the example below:

CYCLONES AND MANGROVE PROTECTION: BANGLADESH

With the greatest population density on earth – 1000 people per sq. km in most areas and higher concentrations along the coasts – Bangladesh is a land-hungry country. It is also extremely vulnerable to yearly tropical storms. The country is home to the Bay of Bengal, the world's largest tide-dominated delta. Cyclonic storms hit the bay every monsoon season, with devastating impacts to its low coastline. These cyclones rework large amounts of the delta sediments, which constitute 80 percent of the Bangladesh land area. Due to delta sedimentation, the rapidly changing eastern coastline does not support mangrove vegetation as diverse as that found on the more stable Sunderbans on the western coast. There, a rich mangrove forest provides three functions:

- Forms the basis of an important forest industry
- Filters upstream silt
- Provides a rich spawning ground for fish and shellfish

Extensive mangrove forests also provide protection during cyclones, and calm lagoons are a place of refuge for coastal populations. Severe population pressure has seriously affected the mangrove belt, however, reducing its ability to protect the coastline.

In 1991, a Bay of Bengal cyclone caused more than 138,000 deaths, mainly from drowning. Since then, the government of Bangladesh has embarked on an ambitious mangrove reforestation program called the Coastal Green Belt to extend the protective mangrove belt eastward. The program is intended to demonstrate the high protective value of mangrove stands in reducing disaster risk. The goal is to protect vulnerable coasts with forest belts two km wide on at least a third of the coastline. Another third is designated for aquaculture, with the remainder intended for agriculture. So far more than 120,000 ha have been planted with high-quality mangroves.

During cyclone Sidr that struck southern Bangladesh in November 2007, the Sunderbans forests played a crucial role in the mitigation of the deadly effects of the cyclone. However, mangroves are not only buffers for cyclones; they are critical ecosystems harboring biodiversity and fisheries breeding grounds.

Source: Sudmeier-Rieux, K., H. Masundire, A. Rizvi, S. Rietbergern. 2006. *Ecosystems, Livelihoods and Disasters: An integrated approach to disaster risk management*. Gland, Switzerland: IUCN.

FAO. Intact mangroves could have reduced Nargis damage. www.fao.org/newsroom/en/news/2008/1000839/index.html (Accessed on June 9, 2010)

Humans depend on ecosystems to mitigate the effects of disasters and to provide resources for their livelihoods. Therefore, livelihood recovery projects should be designed to restore, manage, or have limited impact on the ecosystem.

Slide # 27, What are the Implications of the SL Framework and Asset Pentagon? Show Question # 3 and ask the group(s) assigned that question to report their response. After their presentation, contribute the following comments if they helpfully expand on the discussion.

Other points include:

- The factors that comprise the vulnerability context are important because they can have a direct impact on people's assets and the options available to them to pursue beneficial livelihood strategies.
- People will choose livelihood strategies and activities that conserve or limit their impact on their environment if the incentives for doing so are realistically aligned with their desired livelihood outcomes.
- Natural assets (ecosystems) must be analyzed within the larger livelihoods context (not in isolation).

Slide # 28, In Summary. Conclude the session by presenting the information on this slide.

Slide # 29, Questions? If you have time for questions, invite two or three final questions or comments.

Slide # 30, Let's Take a Break. Inform participants what time the next session begins.

PLAN FOR SESSION 2: ECOSYSTEMS AND LIVELIHOOD RECOVERY	
SESSION TIME	90'
OBJECTIVES	By the end of this session, participants will be able to: <ul style="list-style-type: none"> • Define "biodiversity" and "ecosystem services." • Identify environmental impacts of typical livelihood interventions.
ESSENTIAL CONTENT	This session uses an ecosystem perspective to analyze the impacts of livelihood recovery approaches. This framework is an evolution of previously integrated natural resource management frameworks, not a break with the past. Its core concept lies in integrating and managing the range of demands we place on the environment – indefinitely supporting essential services, goods, and benefits for all without causing deterioration of the natural environment.
OUTPUTS	By the end of the session, participants will produce a set of flip charts with responses to their group's assigned case.
PREPARATION	If necessary, adapt PowerPoint photos to the region or country where the workshop is being held.
RESOURCES	<ul style="list-style-type: none"> • Data projector and screen • Flip charts (three) and markers
HANDOUTS	<ul style="list-style-type: none"> • 8.2.1 Case Studies
FACILITATOR NOTE	The facilitator should be familiar with the ecosystem perspective to the analysis of livelihood recovery and be able to present actual country examples that illustrate the concepts.

Activity 2.1 Ecosystems and Livelihood Recovery

(40 minutes)

Slides # 1 – 2, Session Objectives. Present the objectives for this session. Explain that while it is important to recover livelihoods it is also important to restore and conserve the ecosystems on which these livelihoods depend. The ecological approach to livelihoods provides a framework for considering these issues in livelihood recovery programming.

Explain that you would like to begin by assessing their knowledge and understanding of some basic terms and concepts related to ecosystems.

Slide # 3, What is an "Ecosystem"? Ask participants to recall the definition, which was discussed in the first session. (The review is necessary to ensure understanding of the following discussion.) Explain that ecosystems are classified by dominant vegetation, biological features, or topography, e.g., oak forest, grassland, lake, rock pool, mountainous region, coral reef.

Additional points:

One core concept in discussions of ecosystems is biodiversity. Be prepared to present the definition of biodiversity if asked. Biodiversity refers to the following:

- Variability among living organisms including terrestrial ecosystems and marine and other aquatic ecosystems, and the ecological complexes of which they are part
- Diversity within species, between species, and of ecosystems
- Functional biodiversity in ecosystems provides many goods and services of economic, cultural, spiritual, and social importance

Slide # 4, What Are Ecosystem Services? Ask the question “What are ecosystem services?” and encourage a discussion. Then show the definition: Transformation of natural assets into things people value. Describe and show the examples of the four types of services: provisioning, regulating, cultural, and the service of supporting.

Slide # 5, Example: Ecosystem Services. Present the ecosystem services provided by the “Krueng Sabee Watershed” in Indonesia on this slide.

Slide # 6, What Are Common Environmental Impacts of Livelihood Activities? Ask the participants to brainstorm a range of ideas. Write them on a flip chart. Then discuss the bullet points on the slide that correspond to the text in the content paper in Section 4.

Slide # 7, Some Key Features Related to Livelihood Outcomes. The purpose of this slide is simply to introduce four features to help structure the following discussion on these topics. After reading them, note the final point: *Regard these as required strategies for successful outcomes!*

The next four slides each present one of these features. Just reading them will not be as beneficial as engaging participants in a discussion of each of them. Ask participants to describe personal experiences that illustrate and amplify the information on these slides.

Slide # 8, Local Management/Adaptive Management. Note the points on the slide and ask who has experience with an outside organization engaging local management in ways that resulted in a successful long-term project, and why the project succeeded.

Slide # 9, Intersectoral Cooperation/Multistakeholder Dialogue. Read these bullet points and ask who has had or knows of an experience in which multistakeholders held very divergent views regarding environmental management issues, but reached consensus without compromising the sustainability of the environment.

Slide # 10, Enhanced Benefit Sharing. Discuss the three bullet points. Ask participants why enhanced benefit sharing is so important.

Slide # 11, Marketing and Exit Strategy. Review the bullet points. Ask for participant examples of marketing and exit strategies.

Activity 2.2 Ecological Analysis of Livelihoods Case Studies

(50 minutes)

Slide # 12, Ecological Perspective on Livelihood Recovery Case Studies. Explain that one way to understand how an ecological perspective is applied to livelihoods recovery is to analyze case studies in which this approach has been tried.

Slide # 13, Case Studies. Assign one case study per group of four or five participants (if there are more than

three groups, assign each case study to more than one group as needed). Distribute handout 8.2.1: The Case Studies, found in the electronic file of workshop materials.

Slide # 14, Case Studies Group Exercise. Present the instructions found on this slide and allow the groups to discuss their assigned cases. They will have up to 40 minutes to analyze their case and prepare answers to the questions.

Slide # 15, Lunch... Announce the arrangements for lunch and the time the session after lunch will begin. Inform the participants that they will be asked to present their reports after lunch.

PLAN FOR SESSION 3: SUSTAINABLE LIVELIHOOD PROJECT DESIGN CONSIDERATIONS; EVALUATION AND CLOSING

SESSION TIME	225' (including 15' break)
OBJECTIVES	<p>By the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> • Analyze case studies of livelihood projects. • List key principles for developing successful partnerships and for engaging key stakeholders in sustainable livelihoods recovery projects. • Apply five key analytical components to be considered in the initial design of projects supporting sustainable livelihoods. • Locate information and tools to assist them in identifying potential adverse environmental impacts of livelihoods projects.
ESSENTIAL CONTENT	<p>In this session participants learn about and apply the following five key analytical components of sustainable livelihood project design:</p> <ol style="list-style-type: none"> 1. Assessment of ecosystem area of concern 2. Development of potential adverse environmental impacts 3. Development of elements of a market/exit strategy 4. Development of partnership roles and responsibilities 5. Ensure proper governance
OUTPUTS	<ul style="list-style-type: none"> • By the end of the session, participants will produce a set of flip charts with responses to their assigned case study. • Workshop evaluations will be completed by the participants.
PREPARATION	<ul style="list-style-type: none"> • Carefully read the Hurricane Inez situation report and the three case study livelihood project design examples. • Review the instructions to livelihood project design and be prepared to critique the group reports that will be produced by the participants. • Plan for the workshop closing arrangements and ask the workshop host and/or a participant to make closing remarks. • Prepare certificates if they are to be handed out.
RESOURCES	<ul style="list-style-type: none"> • Data projector and screen • Flip charts (markers) and markers – one chart in front, three charts for participants • Post-it notes (five per participant)
HANDOUTS	<ul style="list-style-type: none"> • 8.3.1 Sustainable Livelihood Project Design • 8.3.2 Workshop evaluation forms • Certificates for completion of the workshop • CD with resource materials related to this workshop

FACILITATOR NOTE

The first activity after lunch is a continuation of the case study exercise started before lunch. Each group should have completed its discussion and prepared a report for presentation in plenary. The facilitator should continue to use the Session 2 PowerPoint presentation used before lunch to structure the debriefing.

After the case study presentations, begin your presentation of Activity 3.2 by asking participants to hold their comments or critiques (these they can provide on the evaluation sheet). If they have questions on presentation content, that is fine, but avoid getting bogged down in plenary with extraneous comments as this will rob time needed for the group work. Emphasize that they are to discuss these issues and work out their answers in their groups, not in plenary – as this will simulate the types of discussions and debates they will have when working with partners in the field.

Activity 3.1 Debrief of Activity 2.2 Ecological Analysis of Livelihoods Case Studies

(30 minutes)

Note: An answer guide to the questions asked in this case study analysis is provided in the Annex at the end of this trainer's guide.

Slide # 16, Case Studies: Small-Group Reports. Welcome participants back from lunch. As participants get settled, ask if they are all ready to make their presentation. When ready, you can point out that they will discuss the case studies in the order shown on this slide. Then move to the next slide to welcome the presenter for the shrimp livelihoods presentation.

Slides # 17 – 18. For each case study, invite one group to report its results (limit each report to five minutes). If more than one group reviewed the same case study, invite the second group to add information that was missed by the first group. After each report, allow questions or comments from other groups not assigned that case study.

Before and during each case study report, show the slide with the photo that corresponds to that case study.

Slide # 19, Questions? If you have time for questions, invite two or three final questions or comments.

Slide # 20, In Summary... Conclude the session by presenting the key points on this slide. When the summary is over, explain that this is the conclusion of the Session 2 activity.

Activity 3.2 Special Considerations in Project Design

(30 minutes)

Slide # 1, Session 3, Sustainable Livelihood Project Design Considerations. Open the PowerPoint file for Session 3. Inform the participants that you will start a new session. This would be a good time for an energizer activity. Do whatever you are comfortable with as a facilitator, but as a minimum ask participants to stand, stretch, and walk around their table.

Slide # 2, Session Objectives. Present the session objectives. Explain that the bulk of this session consists of a simulation in which they will discuss and prepare key design aspects of a sustainable livelihoods recovery project, based on the following presentation and this morning's discussions. For this reason, your presentation will be brief and straightforward.

Slide # 3, Elements of project design. This slide presents the livelihood recovery project design elements that are covered in the presentation and in the simulation. Read the five elements and explain that you will present a few key messages on each.

Slide # 4, Assessment and Analysis. The first key element is assessment and analysis. Present the key assessment categories listed on the slide. Note that each of these will be looked at in detail in the next five slides, so you do not need to elaborate now.

Key areas to assess for sustainable livelihoods project design:

- Ecosystem area
- Livelihood capacities
- Market viability
- Environmental impact of the livelihood
- Main stakeholders (+ or -)

Slides # 5 – 8, Assess, Analyze, and Determine... These slides describe some of the detailed elements that need to be assessed for each category of assessment information listed on the previous slide. Present the information on these slides.

Engage participants with each of the following slides by asking them for examples or their own experiences.

Slide # 9, Assess, Analyze, and Determine: Stakeholders. Note that this matrix is a tool to facilitate the analysis of stakeholders.

Slide # 10, 2. Environmental Project Objectives. Explain that during the assessment phase, project managers (and stakeholders) identify and prioritize key environmental issues related to the livelihoods recovery project. In order to address these issues, it is important to specify, implement, and monitor environmental project objectives (which refer to recommended actions to address the environmental issues, or adverse environmental impacts that have been identified). It is also important to note that assessments of male stakeholders and of female stakeholders will result in different information, as each places different value and importance on environmental issues.

Slides # 11 – 13, Examples. These slides provide an example of environmental operational objectives for two issues identified in the design phase for an aquaculture livelihoods project:

1. Physical alteration and destruction of habitats
2. Water and sediment quality degeneration due to pollution

Slide # 14, 3. Marketing and Exit Strategy. Marketing and exit strategies are also keys to livelihood recovery project design. Present the information on this slide and invite two or three participants to briefly share any other general principles of developing a market strategy, or exit strategy, based on their experience. Review content paper Section 2.6 Project Completion.

Slide # 15, 4. Partnerships. Present the key points listed on this slide.

Slide # 16, 5. Community Governance. Explain that the sustainability of a livelihoods recovery project depends upon engagement of key stakeholders involved with project governance. Present the key points listed on this slide.

Activity 3.3 Design of Sustainable Livelihood Recovery Project

(100 minutes including 15-minute break)

Slide # 17, Ecosystem and Livelihoods Recovery. This slide introduces the simulation exercise, during which the participants will apply the concepts just presented.

Slide # 18, Map. Participants are to imagine that they are in the country of "Hopeland." Hopeland is recovering from the destructive effects of Hurricane Inez, which struck the country just over one month ago. During this simulation they are to imagine that they are part of a multi-organizational effort supporting livelihoods recovery projects in Hopeland.

Slides # 19 – 21, Projects. Form participants into three groups and assign one of the following projects to each group:

1. Fisheries Livelihoods Recovery Project
2. Rice Farmers Livelihoods Recovery Project
3. Housing Reconstruction Workers Livelihoods Project

As you assign each project, show the corresponding photo on the slides.

Slide # 22, Your Role & Objectives. This slide explains the general purpose of the exercise.

The next slide presents the specific instructions.

Slide # 23, Project Design Exercise. Hand out 8.3.1 Sustainable Livelihood Project Design to participants and ask them to read the instructions. Present the instructions on this slide. Answer questions regarding the assignment.

Explain that they have about 10 minutes to read the material and 90 minutes to undertake the seven identified tasks and complete the exercise. Inform them that they can take a coffee/tea break during this time at their convenience (coordinate this with the workshop venue management). However, because of the shortage of time, they need to finish the exercise on time. They are to work as a team, delegate responsibilities as necessary, and manage their time appropriately.

[Note: if your workshop is on schedule, as per the agenda above, participants should be ready to begin reading the materials by 14:30. This means that they should complete the reading, tasks, and break by 16:10. Even if they have not finished by this time, you will need to call a halt to the small-group work and inform them that it is necessary to start the group reports in the interest of finishing the workshop on time.]

Activity 3.4 Group Reports

(45 minutes)

If you are following the proposed agenda, ask participants to stop work at 16:10. Invite each group to report back (approximately eight minutes for the report followed by eight minutes for questions and discussion). These reports should be made with all other participants standing and congregating around the presenting group's flip-chart display.

Slide # 24, Conclusions. Invite participants to retake their seats. Take five to 10 minutes and invite participants

to share any final insights or conclusions. You can encourage this by asking the questions on this slide, “What are you taking back from this exercise? What can you apply to your job?”

Slide # 25, Questions? Answer any outstanding questions if there is additional time.

Slide # 26, Review: Key Elements of Project Design. Remind participants of the five key elements of project design as a summary to this session and the workshop.

Activity 3.5 Evaluation

(15 minutes)

Slide # 27, Workshop Evaluation. Distribute the workshop evaluation and request that all participants complete it. This should also take 15 minutes or less. Collect the evaluations.

Activity 3.6 Closing

(5 minutes)

Ask your host and/or perhaps a participant to speak on behalf of all participants to make closing remarks.

Hand out certificates and the CD of resources if it wasn't given out earlier, if that is part of your plan.

Thank all the people who helped plan and implement the workshop for their efforts. Congratulate the participants on completing the workshop and wish them well in their work, especially as they integrate environmentally sustainable approaches into their livelihoods projects in the future.

ANNEX: ACTIVITY 2.2. ANSWER GUIDE: CASE STUDY DISCUSSION QUESTIONS 1 & 2

1. Ecological analysis of shrimp livelihoods in Aceh, post-tsunami (WWF)

1. What are the elements of the ecosystem in this case study that need to be conserved or are at risk?
 - *Coastal ecosystems, in the ecologically sensitive "greenbelt" where mangroves had been cleared to make room for the farms*
 - *Mangroves and habitat*
 - *Animal species dependent on mangroves for survival*
2. How does this project integrate and seek an appropriate balance between ecosystem conservation and economic and social livelihood considerations?
 - *Relocating shrimp farms away from the coast preserves environment yet allows livelihoods to continue.*
 - *Education and new technology are introduced to teach environmentally friendly practices.*

2. Environmentally responsive rural livelihoods, Lempira, Honduras (FAO)

1. What are the elements of the ecosystem in this case study that need to be conserved or are at risk?
 - *River basin of the Lempa River*
 - *Soil*
 - *Forests*
 - *Organic matter*
 - *Animal, plant, and insect species dependent on this habitat*
2. How does this project integrate and seek an appropriate balance between ecosystem conservation and economic and social livelihood considerations?
 - *It introduces agro-silvo-grazing production technologies on the slopes to increase production and reverse the process of natural resource degradation.*

3. Supporting coir livelihoods in Sri Lanka, post-tsunami⁸ (Oxfam)

1. What are the elements of the ecosystem in this case study that need to be conserved or are at risk?
 - *Sri Lanka's coastal zone is a highly productive ecosystem and an important base for the country's growth, both in economic and in environmental terms.*
 - *Coconut trees and their ecosystem are critical to Sri Lanka's environment and economy.*
 - *Surface waters may be at risk from dumping of pith.*

2. How does this project integrate and seek an appropriate balance between ecosystem conservation and economic and social livelihood considerations?
 - *While environmental considerations are not stated explicitly in this case study, the project does support the reestablishment and development of a livelihood based on a renewable and organic product. The technology will result in less pollution to surface waters at the same time that it boosts the economic benefits to the women coir producers.*