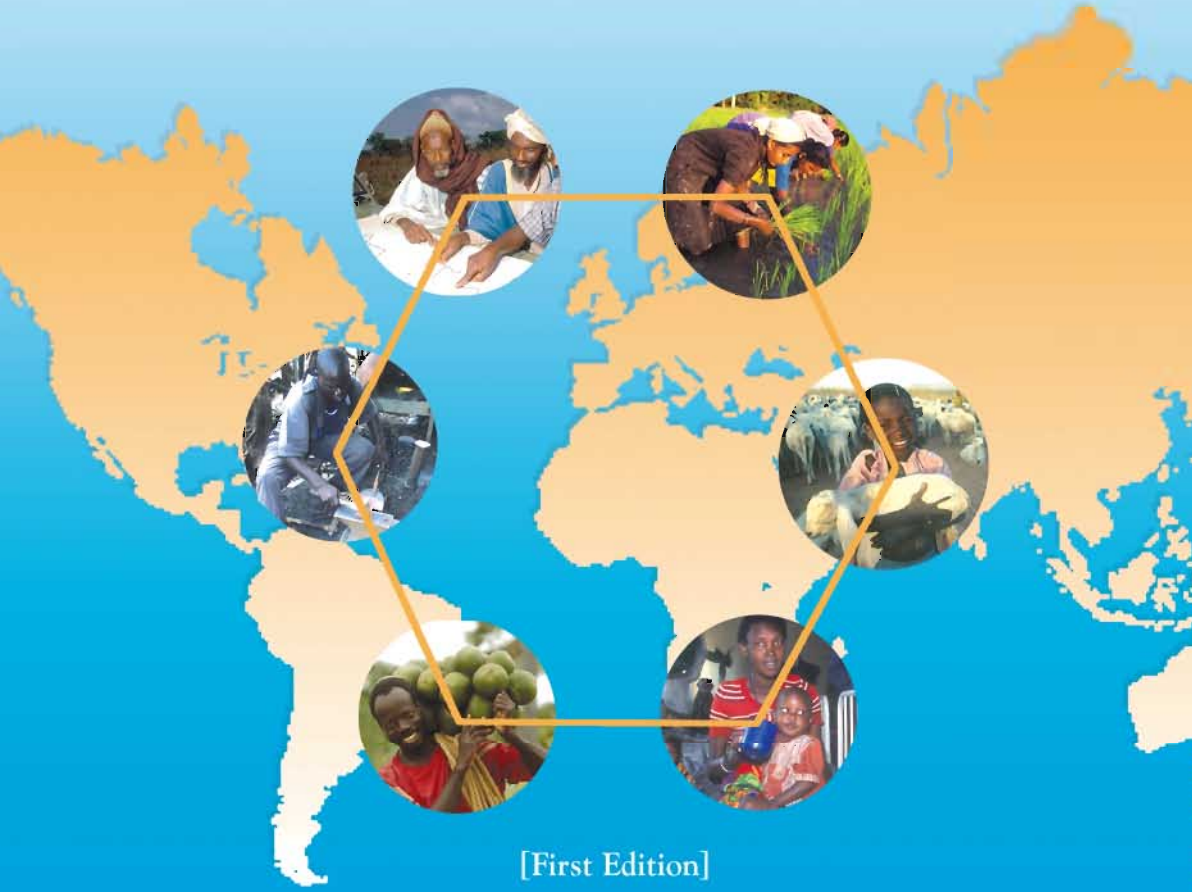
The Livelihood Assessment Tool-kit

Analysing and responding to the impact of disasters on the livelihoods of people



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ACRONYMS AND ABBREVIATIONS

AEZ	Agro-ecological Zones
CBO	Community-based Organization
CSO	Central Statistics Office
DLA	Detailed Livelihood Assessment
DSA	Daily Subsistence Allowance
FAO	Food and Agriculture Organization of the United Nations
FEWSNET	Famine Early Warning System Network
GIS	Geographic Information Systems
IDP	Internally displaced person
IFI	International Funding Institutions
ILIA	Initial Livelihood Impact Appraisal
ILO	International Labour Organization
LAT	Livelihood Assessment Tool-kit
LB	Livelihood Baseline
LFS	Labour Force Surveys
NGO	Non-governmental organization
OCHA	Office for the Coordination of Humanitarian Affairs
PDNA	Post-Disaster Needs Assessment
PRA	Participatory Rapid Assessment / Appraisal
SLF	Sustainable Livelihoods Framework
SSI	Semi-structured Interviewing
TL	Team Leader
UN	United Nations
UNDAC	United Nations Disaster Assessment and Coordination
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
UNOSAT	United Nations consortium created to provide enhanced access to satellite imagery and geographic information systems
WFP	World Food Programme

PREFACE

In 2007 a total of 414 natural disasters were reported, spread over some 115 countries, killing 16 847 people, affecting more than 211 million others and causing economic damages amounting to USD 75 billion. This is part of a trend of rising disaster frequency, and in this context, protecting and rebuilding the livelihoods of those vulnerable to disasters becomes an urgent priority.

Assessing the impact of disasters on the livelihoods of people and the capacity and opportunities for recovery and increased resilience to future events is an important part of the response to disasters, yet current assessment systems are often weak, uncoordinated and are not strongly linked to livelihood recovery interventions. In order to improve understanding of the impact of disasters on livelihoods, the Food and Agriculture Organization of the United Nations (FAO) and the International Labour Organization (ILO) have jointly developed the Livelihood Assessment Tool-kit (LAT). The LAT consists of three main technical elements: Livelihood Baseline Assessment (which is undertaken pre-disaster); Immediate Livelihood Impact Appraisal (undertaken immediately after the disaster); and Detailed Livelihood Assessment (undertaken up to 90 days after the disaster).

In the process of development, the LAT has been tested, redefined and refined in a number of countries including Pakistan (2005 Kashmir earthquake); Indonesia (2006 volcanic eruption and earthquake in Yogjakarta); Philippines (2006 Typhoon Reming); Bolivia (2007 flooding); and Pakistan again in 2008 (livelihood baseline work). This process of continual learning and improvement continues, and so the current set of guidelines contained in these volumes should be seen as one stage in the development of the approach.

In this spirit, suggestions for improvement are welcomed
and should be directed to:
TCE-LAT@fao.org and cruciani@ilo.org

FAO, Rome and ILO, Geneva
April 2009

VOLUME 1

Methodological and Conceptual Overview

The Livelihood Assessment Tool-kit

Analysing and responding to the impact of disasters on the livelihoods of people

Volume 1: Methodological and Conceptual Overview

[First Edition]

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Overview of the Livelihood Assessment Tool-kit for Sudden Onset Natural Disasters

The Livelihood Assessment Tool-kit (LAT) process consists of three inter-related elements: a **Livelihood Baseline** (LB); an **Initial Livelihood Impact Appraisal** (ILIA); and a **Detailed Livelihood Assessment** (DLA). As currently designed, the LAT is aimed at sudden onset natural disasters. However, it is planned to extend the coverage of the LAT to other types of emergency.

Each of the three parts of the LAT serves different but related functions in the assessment process. Each part may also have different targets in terms of funding mechanisms and may be executed by different people, as indicated in the following table.

Element	Function	Programming/ funding target	When and by whom?
LB - Livelihood Baseline	To provide a good picture of 'normal' livelihood patterns in areas at risk from natural hazards together with an indication of likely impact of hazards, key response priorities and institutions likely to be involved in recovery. Gives a 'head start' for post-disaster assessments. Provides the pre-disaster context for the ILIA and DLA, so enhancing the power of these tools to make informed generalizations on the livelihood impact and opportunities presented by the disaster.	It is useful to elaborate quick briefs for flash appeal, early recovery donor conference and information to the public. Could be used to extrapolate from, if ILIA is not possible before Flash Appeals.	When? Time taken to compile baseline: Heavily dependent on size and complexity of hazard prone areas. In Pakistan, district level baselines take 2-3 weeks each. Compilation done before the disaster. By whom? Ideally, multi-agency teams drawn from UN, governments, NGOs.

cont./

ILIA - Initial Livelihood Impact Appraisal	Initial assessment of impact of disaster on livelihoods at 'local level' – to be integrated into multi-sectoral quick impact assessments and feeding into Flash Appeal proposals.	ILIA provides immediate first hand information on the impact of the disaster on the livelihoods of the affected people. This info is to be combined with the baseline, thus giving a solid basis to the proposals for immediate action on livelihood recovery that will feed the first Flash Appeals, early recovery donor conference and subsequent livelihoods programmes.	When? Duration of assessment: 1 – 7 days. Usual window for assessment: Within first 10 days after disaster. By whom? Ideally national government and UN staff / consultants integrated into the United Nations Disaster Assessment and Coordination (UNDAC) team.
DLA - Detailed Livelihood Assessment	Assessment of impact of disaster on livelihoods and opportunities, capacities and needs for recovery at household, community, and local economy levels. Includes conversion of the results of assessments into response options containing strategy outlines programme profiles and concrete projects.	Provides a more detailed information and rationale for strategies, programmes and projects to be submitted to Revised Flash appeal and / or Early Recovery donor conference, for funding purposes, and / or development of Livelihood Recovery Strategies.	When? Duration of assessment: 30 days. Usual window for assessment: Within 90 days of the disaster. By whom? Multi-disciplinary, multi – agency teams (including National government staff) led by livelihood specialists.

The LAT approach has several important features, including the following:

- **Strong linkages between tools:** The three assessment stages of the LAT are closely linked in the sense that they support and feed into one another. Thus the baseline sets the pre-disaster context and defines certain questions and relationships for the post-disaster ILIA and the DLA. The ILIA will provide a general picture which will be refined and developed by the DLA, and the DLA itself will help re-define the baseline.

- **Quantitative and qualitative:** A key function of the baseline is to provide a context within which the findings of the more qualitative and area specific ILIA and DLA can be interpreted. Combining a more quantitative, generalized baseline picture with the ILIA and particularly the DLA means that we can derive prevalence, gauge severity and trace processes in a way which is not possible when either quantitative or qualitative methods are used alone.
- **Livelihood opportunities and capacities, as well as impact:** In addition to looking at the impact of a disaster on people and their current coping strategies, the LAT approach actively identifies capacities and opportunities for recovery and increased resilience. This means that it goes further than most assessment methods.
- **Tailored to funding and programming mechanisms:** The assessment methods and stages are specifically tailored to key funding and programming mechanisms. The ILIA, building on and utilizing the baseline is tailored to the Flash Appeal, whereas the DLA, again combined with interpretation of the baseline, is aimed at a revised flash appeal and / or an early recovery donor conference. The DLA is also intended to serve as the basis for more detailed project and programme formulation missions leading into a number of programming avenues including government livelihood recovery strategies and agency specific projects and programmes.
- **A modular approach:** Whilst the three assessment tools are related and are utilized to most powerful effect when used as a "package" they can also be used independently. This has been done in recognition of the fact that it may not always be possible to have a full suite of elements in each given emergency situation. Thus, a DLA may be carried out even if no prior baseline information is available or no ILIA has been carried out immediately after the onset of the disaster. Likewise, a successful ILIA does not depend on an ex-ante LB (although it would benefit from one).

Assessment preparedness

In order to be most effective, the LAT should be integrated as much as possible into country level disaster preparedness systems and structures and supported by global level capacities where relevant. The key elements of *assessment preparedness* can be summarized as follows:

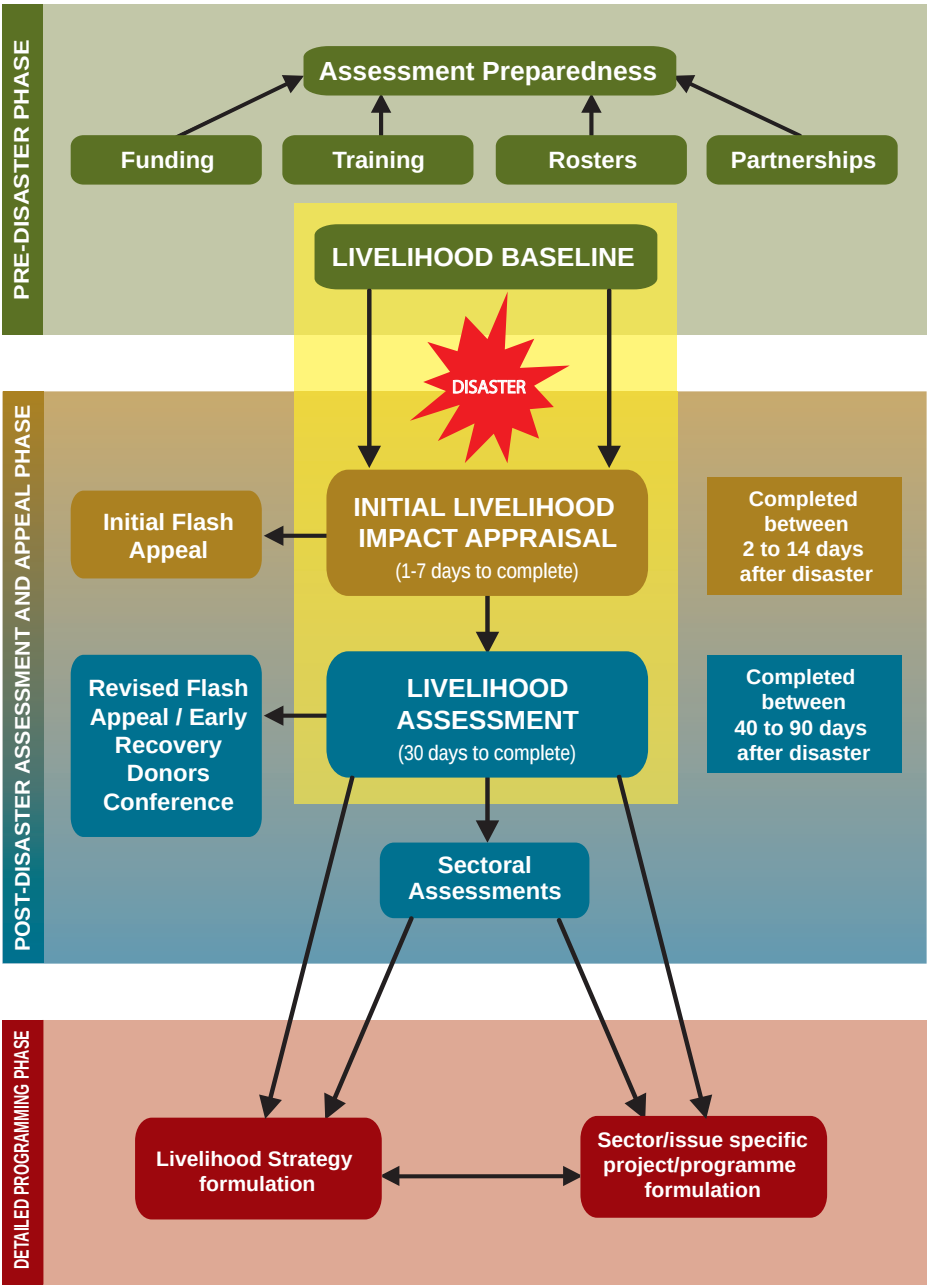
Partnerships: The LAT cannot proceed effectively without the active support and participation of government and development partners. Furthermore, the results of LAT assessments have to be communicated in timely and effective manner to government and donors through appropriate mechanisms and fora. This requires training and accordingly an LAT training package is under development. In general, the buy in and support of government, donors and partners at country level needs to be assured through dialogue, mutual learning, training and sensitization.

Development of expert rosters: development of rosters of national, regional, and headquarter level experts from FAO, ILO and other organizations and consultants. This is key to ensure that assessment teams can be properly led in the field.

Quick release financial mechanisms: Rapid response financial mechanisms for post-disaster assessment have to be mainstreamed into disaster preparedness by the United Nations (UN) and governments at country level.

Figure 1 on the next page illustrates the relationships between the different parts of the LAT and the various funding and programming mechanisms.

Fig. 1: Livelihood Assessment Tool-kit - timeframes and relationships to funding tools



Sustainable Livelihood Approach and the LAT

The LAT is underpinned conceptually by the *Sustainable Livelihoods Framework* (SLF)[1]. *Livelihoods* consist of the capabilities, assets - both material and social resources - and activities required for a means of living. A livelihood is *sustainable* when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, and provide net benefits to other livelihoods locally and more widely, both now and in the future, while not undermining the natural resource base[2]. The extent to which a livelihood is sustainable is determined by the interaction of several forces and elements. These are set out conceptually in the SLF, as indicated in Fig. 2.

The framework consists of a number of key elements as follows:

- Livelihood assets and activities
- Vulnerability and coping strategies
- Policies, institutions and processes
- Livelihood outcomes

As can be seen in the following figure, the livelihood framework contains a "core" in which *assets* are put into use through certain *strategies and activities* to produce certain *livelihood outcomes*. This core exists in a context characterized by existing *institutions and policies* affecting people, from the extended family and local community to the larger context of the national state and beyond, and the *vulnerability context* which describes the set of external social, economic and political forces and stresses to which people are subject[3].

1 Based upon the SLF, the LAT focuses specifically on the productive aspects of livelihood. That is, it is concerned with the impact of natural disasters on how individuals and households make a living (their capabilities and activities for earning income and the means of sustenance and accumulation). The focus on the productive aspect of livelihood is to be distinguished from the reproductive aspect which is concerned with how incomes and other inputs into the household are used (e.g. in cooking and caring for children) to promote good mental and physical health of individuals within the household.

2 Source: Chambers and Conway "Sustainable Livelihoods: Practical Concepts for the 21st Century" IDS Discussion Paper 296 (1992).

3 The most common unit of livelihood analysis is the household, though for some purposes (such as employment) information may be collected at the level of individuals, and in other respects (such as natural resources) it may be gathered at the level of zones, villages, ethnic groups or some major or minor administrative geographical divisions.

Livelihood assets

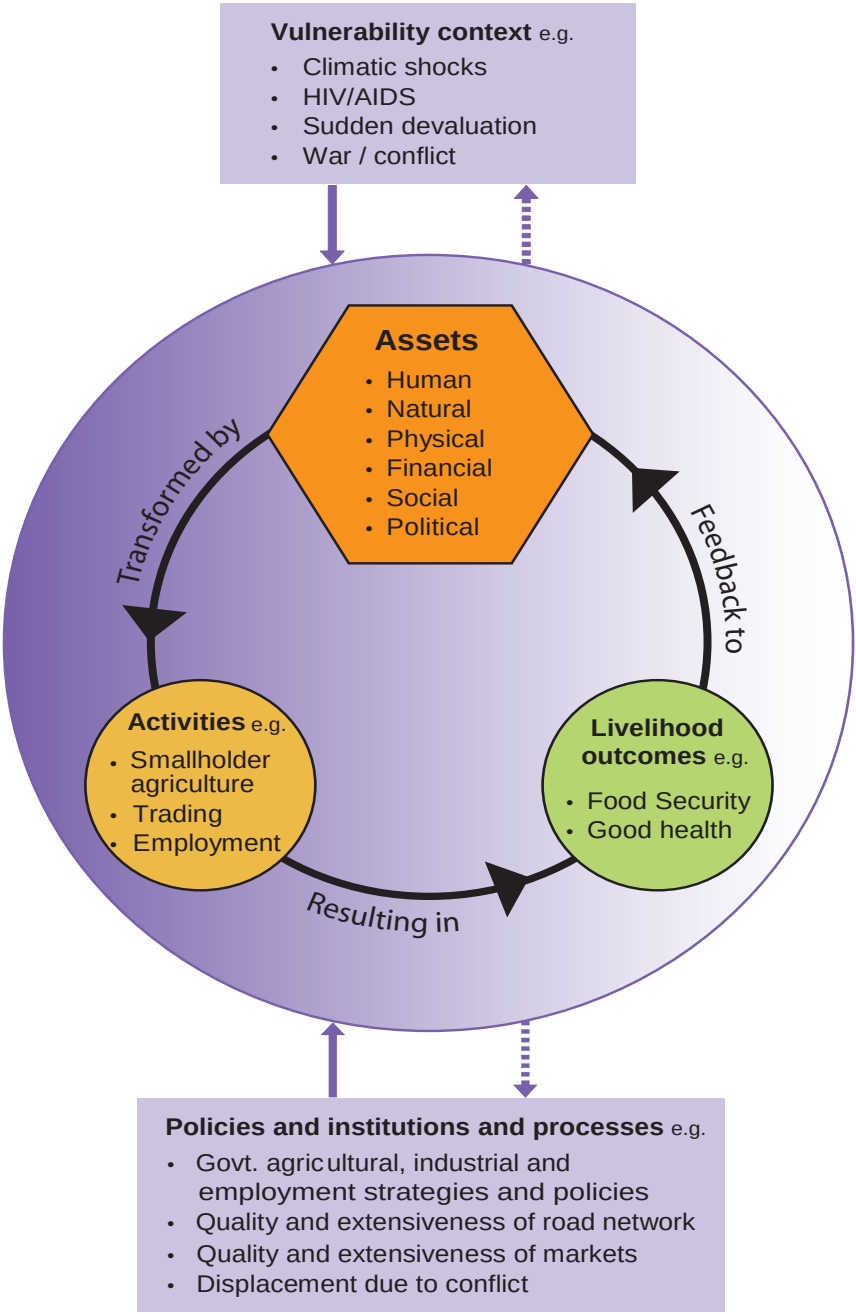
Assets refer to the resource base of people. Assets are often represented as a pentagon in the SLF, consisting of the following five categories: natural resources (also called 'natural capital'), physical reproducible goods ('physical capital'), monetary resources ('financial capital'), manpower with different skills ('human capital'), social networks of various kinds ('social capital').
These various categories cover the following types of issues and details:

- **Human capital:** labour power, health and nutritional status, skills and knowledge;
- **Natural capital:** access to land, water, wildlife, flora, forest;
- **Social capital:** refers to those stocks of social trust, norms and networks that people can draw upon to solve common problems. It is mediated through kin networks and group membership;
- **Physical capital:** houses, vehicles, equipment, livestock;
- **Financial capital:** savings, gold/jewellery, access to regular income, net access to credit, insurance.

Increasingly, it is being recognized that in addition to these five categories, it is important to include analysis of *political capital*. This goes beyond social capital, in that, an individual's stock of political capital will determine his/her ability to influence policy and the processes of government. An understanding of political capital is important in determining the ability of households and individuals to claim *rights* to assistance after a disaster. It also has implications for the types of recommendations that come out of the DLA.

A diagram of the Sustainable Livelihoods Framework (SLF) is shown overleaf.

Fig. 2: Sustainable Livelihoods Framework



The following box provides two examples of specific livelihoods groups, and shows how each combines their various assets to 'make ends meet'.

Pastoralists in Somalia....

The pastoralist production system in Somalia has developed in a context where the *natural resource base* is comprised of extensive arid lands. The main *productive asset* is livestock of varied species and herd composition. Mobility is the main strategy for managing livestock assets, which in turn depends on the *social structure* and on a strong territorial clan system that mediates access to grazing resources. Extensive knowledge about environmental management and livestock husbandry skills are part of the *human capacity resource base*, and are used to make decisions based on multiple choices aimed at achieving a favourable livelihood outcome.

Rural – urban migrants in Bolivia....

Recent immigrants into poor neighbourhoods of the La Paz-El Alto urban complex in Bolivia (pop. about two million) often keep some *land or livestock resources* in their area of origin in the surrounding highlands. Household members may take turns to take care of these agricultural assets and activities in the countryside, while they also engage in *several occupations in their new urban residence*: odd jobs in construction for adult males, children or teens doing shoe-shining, young women working as maids in well-to-do households in town, and perhaps wives keeping a small street-side fruit-vending business. All of them may be returning to their original community for some important activity like harvests or sheep shearing.

Thus, migration does not mean necessarily abandoning peasant agriculture for good, but leading a dual life in between urban and rural areas, perhaps keeping dwellings in both, when the two areas are close enough to make it feasible. In other cases, rural assets are sold or rented off, and the family moves completely to their new residence in an urban area.

Vulnerability and coping strategies

Individuals, households and communities are exposed to unpredictable events that can undermine livelihoods and cause them to fall into poverty or destitution. Some of these events have a sudden onset (e.g. earthquakes) while others develop over a longer period (e.g. conflict, soil erosion), but all can have negative effects on livelihoods.

In a disaster, the entire population may have been exposed to the same shock, but the *vulnerability* and resilience of people to the impact of the shock will vary. Vulnerability depends on the asset base that people have prior to the crisis and their ability to engage in various coping strategies.

Households with many livelihood assets are generally more *resilient* (able to withstand shocks) than 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 and *pastoralists* can afford to lose or sell a few animals and still have enough to build up their herds again after the emergency passes.

A *coping strategy* is a short-term response to threats to livelihoods. Coping strategies can be successful (in terms of protecting the ability to make a livelihood) when they are able to preserve vital assets, or negative when they are unable to do so and may lead to downward spirals of impoverishment. Any response should aim to support existing positive coping strategies and release households and communities from dependence on negative ones.

Examples of coping strategies of affected populations following the Kashmir earthquake in 2005:

- Distress migration to peri-urban areas;
- Selling or slaughtering animals;
- Consuming crops that were either ready for harvest or had just been harvested.

The magnitude of the shock, coupled with the low level of assets of the population meant that for many people these coping strategies were unable to preserve vital assets.

An understanding of coping strategies, who is involved, and the consequences and costs involved is important in analysing the severity of impact of an emergency.

The institutional context

Policies and institutions represent an important set of external factors that influence the livelihoods of different people, influencing access to assets, vulnerability to shocks and livelihood outcomes.

Examples of institutions:

- *Formal membership organizations* such as cooperatives and registered groups;
- *Informal organizations,* such as exchange labour groups or rotating savings groups;
- *Political institutions*, such as parliament, law and order or political parties;
- *Economic institutions*, such as markets, private companies, banks, land rights or the tax system;
- *Socio-cultural institutions*, such as kinship, marriage, inheritance, religion or draught oxen sharing.

An enabling policy and institutional environment makes it easier for people to gain access to assets they need for their livelihoods. A disabling policy and institutional environment may discriminate against them, thus making it difficult for them to get access to land, livestock, capital and information.

Many efforts to reduce vulnerability to disasters have failed or proved to be unsustainable because they have not fully understood local institutions and the way they influence livelihoods. Clearly, it is important to understand which institutions are enabling or disabling for livelihood recovery, and which are the best institutional entry points for ensuring that people are reached.

Livelihood strategies and outcomes

The most basic livelihood outcomes relate to satisfaction of elementary human needs, such as food, water, shelter, clothing, sanitation, health care, and others. The ultimate outcome is to achieve the preservation of the household and to rear the next generation with a desirable quality of life.

People tend to develop the most appropriate livelihood strategies possible to reach desired outcomes such as food security, good health, "well being" etc. Unstable or unsatisfactory livelihood outcomes may be the result of several factors which often interact, including low levels of livelihood assets, high degree of vulnerability to external shocks, and insufficient livelihood support from surrounding institutions (e.g. local government, financial markets). It is the job of the LAT to separate the importance of these various factors in explaining the impact of a disaster on livelihood outcomes.

VOLUME 2

Livelihood Baseline and Contingency Plan

The Livelihood Assessment Tool-kit

Analysing and responding to the impact of disasters on the livelihoods of people

Volume 2: Livelihood Baseline and Contingency Plan

[First Edition]

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Section 1: Introduction

1.1 Objectives of livelihoods baseline data

Livelihood baseline information should be seen as an essential part of national Disaster Preparedness. For this reason, it should be collected in advance, and kept updated, on areas and populations likely to suffer disasters and crisis of various sorts[1].

Livelihoods baseline information helps emergency workers know in advance about the population of the affected area. In the context of the normal emergency appeal timetable, and the other elements of the Livelihood Assessment Tool-kit (LAT), the livelihood baseline is intended to meet the following specific objectives:

- Facilitating comparison of the livelihood context, activities and outcomes for families, communities and local economies before and after a disaster
- Providing a robust basis for making estimates of the impact of disasters on livelihoods, that can feed into **flash appeals**.
- Giving a 'head start' to and providing a basis for immediate post-disaster assessments including the **Initial Livelihood Impact Appraisal** (ILIA - Volume 3); and
- Providing a basis for the more in-depth **Detailed Livelihood Assessment** (DLA - Volume 4).

Collecting, updating and analysing livelihood baseline information is an integral part of the general disaster preparedness function. Training for this function should incorporate the preparation of livelihood baseline information as an essential element.

1 Whilst it is important to prepare livelihoods baseline information **before** a disaster hits, this may not always be possible. When disasters occur in unexpected places, baseline information must be compiled on the spot, in a much more summary way. For details on preparing such a "reactive" livelihood baseline, readers should refer to the ILIA guidelines (Volume 3) and the DLA guidelines (Volume 4).

1.2 How should the Livelihood Baseline Guidelines be used?

These guidelines are meant to be used by teams of people from the United Nations (UN), non-governmental organizations (NGO) and governments who are charged with the task of creating a livelihood baseline (LB) as part of a broader Disaster Preparedness and Disaster Risk Management effort. Such teams should include at least one statistician who is familiar with national census data and socio-economic surveys. They should also include persons who are familiar with key Participatory Rapid Assessment (PRA) techniques and are able to use these in the field with different groups of key informants.

In order for the baseline to be an operational document, how it is done is as important as what is in it. The 'how' of the baseline is very important as it will determine the degree of 'buy-in' and ownership of the product by government and other key stakeholders. For this reason, it will be important to involve certain stakeholders – particularly government, key NGOs and UN agencies - at every step of the baseline process as key informants, as part of fieldwork teams and as reviewers, so that they can give their stamp of authority on the finished baseline product.

1.3 Contents of the Livelihood Baseline Guidelines

These guidelines are structured around the basic contents of an area specific baseline, showing why particular types of information are important, and where and how such information may be gathered. The contents and the process steps suggested here should be feasible in all countries at risk of natural disasters, although they should be interpreted in a flexible manner in different countries according to the local situation, most importantly the set up of government institutions and the kind and quality of information available.

1.4 Types of information, partner institutions and timeframes

1.4.1 Types of information

The following four types of information are normally necessary for creating a livelihood baseline:

1. Published statistics covering areas such as demography, employment, land sizes, cropping patterns, livestock numbers
2. Maps showing the geographical areas at risk with delineation of important administrative boundaries.
3. Reports and studies relating to livelihoods and hazards in the areas at risk. This covers a wide spectrum including official government reports, research and academic studies, UN, regional and World Bank reports, studies by international and national NGOs.
4. Information derived from PRA exercises facilitated by the baseline team. This includes mapping, historical (hazard) timeline, livelihood zoning, wealth/livelihood classifications and seasonal and response calendars.

The development of a good LB for an area at risk of natural disaster is both a science and an art, depending on judicious use (and possible re-analysis) of existing information and blending this with a number of PRA techniques. Depending upon the local circumstances, there may be plentiful data on aspects of livelihoods or there may be very little. The information may be quantitative or qualitative in character, and may or may not require further analysis and manipulation to produce the required results. Where it is known that quantified data are likely to exist and can be processed/retabulated (e.g. from census data) some dummy tables are suggested (see section 7 below).

1.4.2 Sources

The most important sources for baseline data are:

- Key informants at district, sub-district and household levels;
- household surveys including:
  - labour force and employment surveys,
  - health and nutrition surveys,
  - household income and expenditure surveys,
  - food consumption/food security surveys, etc.;
- qualitative livelihood (or similar) studies on specific areas, including ethnographic studies, analysis of farming systems, community surveys;
- Statistics on health services, nutrition services, social protection programs, and other relevant activities in the area at risk;
- maps, geographic information systems, satellite imagery watershed maps, agro-ecological zoning;

- crop assessments, agricultural production estimates for the area at risk;
- population censuses;
- agricultural censuses;
- agricultural surveys; and
- institutional data and listings (existence and membership of institutions or organizations in area at risk, list of organizations in the area, especially unions, micro-finance, religious-based organizations with a social purpose, etc.).

1.4.3 Institutional partnerships

Preparing the Livelihood Baseline is part of the general Disaster Preparedness process, and should be integrated into it whenever possible. Ownership should remain, as far as possible, with the Government (national and local). Key partnerships should be made with the following institutions:

- **Ministries responsible for disaster management and response:** Many countries which are prone to natural disasters have ministries or agencies charged with the task of coordinating responses to disasters. In those cases where such institutions do not exist, normally the office of the President/ Vice President/Prime Minister will take on these functions. Whatever the particular institutional setup, it is vital that the relevant Agency/Ministry is involved in the development of the baseline at central and decentralised levels where possible. In this way, the chances of the baseline becoming mainstreamed as a part of national government disaster management and response are increased.
- **Local Government:** Involvement of local government is important, particularly in the growing number of countries where there is significant decentralization of decision-making and budgetary power. In such cases, the livelihood baseline can help shape resource allocation as well as assessment planning at the local level.
- **Ministries of Agriculture[2] and Ministries of Labour:** These are likely to be the most important of the various line ministries. The Ministry of Social Welfare could also be important.
- **Central Statistics Office (CSO):** This is the natural counterpart for the statistical aspects of the LB. A key institutional arrangement, which is

2 Including livestock, fisheries and forestry.

desirable to make in advance, is an agreement with the CSO of the country to work in a collaborative manner with Census and Household Survey databases, including the possibility of obtaining new tables not included in official publications (e.g. tables for specific areas at risk, or some specific analysis demanded by the purpose of the baseline). Household surveys include labour force and employment surveys, which are usually conducted annually or seasonally, plus Household Income and Expenditure Surveys which are usually conducted every five or more years. Demographic, Health and Nutrition surveys may also provide useful information and some countries perform them on a regular basis every 4-5 years or so.

- **UN agencies:** Several UN agencies may be involved in assisting the government to gather livelihood information, and often could provide valuable help in development of the baseline. They include the United Nations Development Programme (UNDP), World Food Programme (WFP), United Nations Children's Fund, UNHABITAT, United Nations High Commissioner for Refugees, UNOSAT, and others.
- **NGOs:** Major international NGOs like Oxfam, Save the Children and CARE use the livelihood approach or similar conceptual frameworks for their areas of intervention, and may provide useful information that could be incorporated into the baseline. Other international and national NGOs may also provide useful data and key informants. In addition, members of these agencies may become part of the team(s) which develop baselines in particular areas.
- **Research institutions:** Universities, consultancy and research companies may have important published and unpublished data on the geographical areas of interest. These should be consulted as appropriate. It may also be possible and appropriate to include researchers on the baseline development teams.

Time frame: The time taken to compile a baseline in a particular country will depend on a range of factors which include the size and complexity of hazard prone areas, availability of secondary information, statistical data and access to data sets. In Pakistan, the time taken to prepare one district level baseline was roughly three weeks using a team of three local experts. It is estimated that with sufficient funding and manpower, the 30 most hazard prone districts in Pakistan could be covered in 12-18 months.

1.5 Structure of the Baseline and Contingency Plan[3]

An area based livelihood baseline and contingency plan should consist of a number of elements, arranged sequentially. These include the following:

- **General description of the area at risk (typically a region/province/district):** This lays out the main geographical and socio-economic features of the area at risk.
- **Hazard information:** This shows the history of hazards in the area at risk: the frequency and severity of different hazards and the geographical areas where they strike (see section 2).
- **Demographic information:** The next element in the baseline is a description of the demographic characteristics of the populations in the areas at risk. This can be derived from census data, updated as necessary using growth factors (see section 2).
- **Livelihood profiling:** Here, livelihood zones in the area at risk are delineated and different livelihood groups are described and quantified. To do this, a range of secondary and primary information is required. The key secondary data will be concerned with various aspects of livelihood - particularly agriculture and employment for rural areas and various aspects of employment for urban areas. In the methodology of the baseline and contingency plan, primary data is collected using semi-structured PRA techniques. Section 3 indicates the kinds of secondary and primary data needed.
- **Seasonal impact and response calendars:** This shows us the main livelihood activities in which people are engaged in the area(s) at risk over the course of a year, how these are affected by different hazards and what that implies in terms of intervention types and timing (see section 4).
- **Response typologies:** This gives likely scenarios in terms of numbers of people likely to be affected by particular hazards, together with projected livelihood support needs quantified as much as possible (see section 5).
- **Institutions for livelihood support:** This highlights the institutions that have the capacity to help with the kinds of responses identified (see section 6).
- **Socio-economic tables and statistics:** This consists of various tables derived from the secondary data used to contribute to the livelihood profiling. It also represents a useful reference resource for post-disaster assessment and planning in its own right (see section 7).

3 This structure derives from work on a pilot project in Pakistan during 2008.

Section 2: Hazard risk - Geography and Demography

This is the foundation of the baseline exercise. It consists of identifying the main hazards for the area at risk, indicating historical frequency and severity, mapping the areas at risk of being struck by natural hazards and totalling the number of people residing in these areas and their demographic characteristics.

2.1 Geography

The goal here is to gain consensus on the most important hazards that strike particular areas at risk (as high risk areas may be prone to several hazards) together with more precise indications of where they are likely to strike. The possible hazards will include:

- Cyclone / typhoon / hurricane;
- Seasonal floods;
- Flash floods;
- Tsunami;
- Earthquake;
- Landslide;
- Volcanic eruption;
- Forest fires;
- Transboundary pests and diseases; and
- Drought.

There are several starting points for the hazard mapping, these include:

- Geographical information systems (including satellite imagery);
- Internet sources (see below);
- Ordinary cartography; and
- Historical information on frequency of various events.

In addition, it should be noted that several specialized databases and Geographic Information Systems (GIS) mapping applications exist for various countries and these may be accessible from the internet. Useful addresses include:

- http://undp.desinventar.net. This allows the user to produce a wide variety of maps and charts on the impact of various natural hazards on different parts of a list of disaster prone countries. The countries currently covered by desinventar include: Guyana, Iran, Jamaica, Mozambique, Nepal, Sri Lanka and Trinidad and Tobago. Orissa state in India is also covered. In order to use the service, a knowledge of databases is required.
- http://www.maproom.psu.edu/dcw. This is a service run by the Penn State University in the USA. It has a facility whereby users can create their own maps of different countries by layering different features (e.g. population density and road networks). Downloadable software is required to do this. One drawback is that the maps themselves are quite dated (1996-97).

2.1.1 Process

The first step will be to produce a hazard timeline or matrix, this should specify the kind of hazard event, the frequency of the event, the season or duration of the event, and the areas that it affected. It should also indicate, in a qualitative manner, physical damage caused, losses to incomes and overall impact on lives and livelihoods.

Undertaking this exercise with a group of key informants at the relevant administrative/geographical level is a good starting point for the subsequent mapping process. The choice of level depends on a combination of the area physically at risk from the hazard and the set- up of government administration. In countries with significant decentralisation, district level may be most appropriate as it will describe the territory over which local authorities have power to operate and coordinate. In some countries, however, particularly those which are large and dispersed over several islands (e.g. Indonesia) operating at a higher administrative level than district may be more feasible and appropriate.

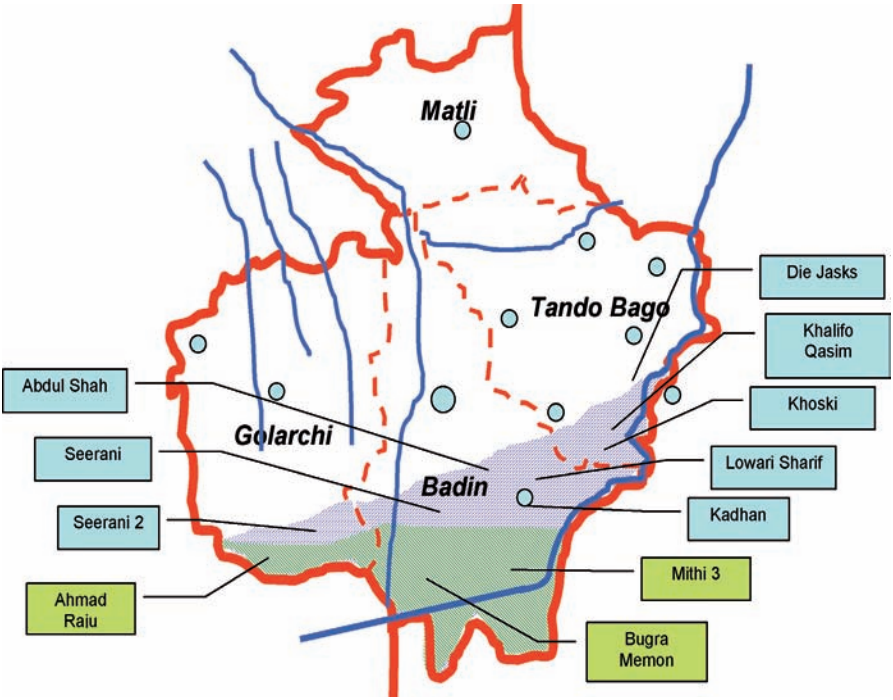
Table 1 gives an example of a hazard matrix for a cyclone prone district in Pakistan.

Table 1: Hazard Matrix for Badin district, Sindh Province, Pakistan

Hazard	Frequency (this will come from hazard timeline)	Season	Geography	Typical Damage score (max = 5)	Typical Loss score (max = 5)	Overall impact on lives and livelihoods score
Cyclone	Every 2- 3 years	May - June	Coastal parts of Badin and Golarchi Tehsils	5	3-4	High
Monsoon floods	Most years	3 weeks after start of monsoon (between June and September)	Parts of Badin and Thando Bago Tehsils	3	2	Medium
Storm surge	Every year	May – July spring tides	Coastal parts of Badin and Golarchi Tehsils	2	2	Low - Medium

Having done the matrix, the next step is to depict the hazards on a map, again with the help of key informants. The map of Badin district on the following page is an example.

Figure 1: Map of Badin district, Pakistan, showing areas at risk from cyclone and flooding



Key:
Matli, Badin, Tando Bago and Golarchi are all names of Tehsils (the next level down administratively from a district).

Ahmed Raju, Bugra Memon etc. are names of Union Councils (UC - the next level down administratively from a Tehsil).

The green/darker shaded area is identified as being the most prone to cyclones and flooding. The blue/lighter shaded area is also prone but slightly less likely to be hit by these hazards than the green/darker area. Areas above the blue/lighter shaded part of the district are perceived not very likely to be hit by these hazards.

2.2 Demography

The goal here is to get as detailed a picture as possible of the demography of the population in the area at risk.

Basic tables to be prepared

Tables should be prepared at least for the whole area at risk (or for the

administrative divisions most closely approximating it). If possible, tables should also be prepared separately for every subdivision of the area at risk (e.g. for each district, municipality or whatever other meaningful subdivision is relevant).

It is suggested that in the main body of the baseline report, an overall summary of population at risk is given, with a number of other detailed tables attached in the statistical annex. (see section 7 for more details). An example of a summary table is given below:

Table 2: Summary population table for populations at risk in Tharparkar District, Sindh, Pakistan

Name Taluka/Tehsil	Name of UC	Estimated population 2008		
		Total	Male	Female
Chachro Tehsil				
	Chachro	29,685	16,287	13,398
	Dahli	33,175	19,422	13,753
	Gadro	30,609	17,771	12,838
	Hirar	30,006	16,605	13,401
	Jesejopar	31,427	18,539	12,888
	Khinsar	35,780	20,190	15,590
	Laplo	33,596	19,186	14,410
	Mithrio charan	30,269	17,671	12,598
	Parno	36,872	21,528	15,345
	Piranojopar	29,686	17,397	12,289
	Rajoro	34,679	18,812	15,867
	Saringiar	34,108	19,098	15,010
	Tar Ahmad	26,216	14,574	11,642
	Tar-Dos	35,823	20,533	15,290
	Vijhiar	30,409	16,497	13,912
Subtotal		482,339	274,110	208,230

cont./

Nagarparkar Tehsil				
	Setidera	24,851	13,405	11,446
	Tigusar	26,730	14,653	12,077
	Pilu	28,606	15,299	13,308
	Virawah (half parts)	13,299	7,437	6,562
	Harho	27,446	14,509	12,937
Subtotal		120,932	65,903	56,330
Mithi Tehsil		314,062	167,913	146,150
	Singaro	26,523	14,298	12,225
Total population at risk		629,794	354,311	276,785
% of population in district Tharparkar		51	52	49

Section 3: Livelihood Profiling

3.1 Livelihood Zones

It may be the case that livelihood zones have already been established for areas at risk. These are zones within which people share broad common livelihood-sustaining activities and goals. It should be noted that such zones normally exist only for rural areas, although there are some urban examples.

Key sources of information on livelihood zones include:

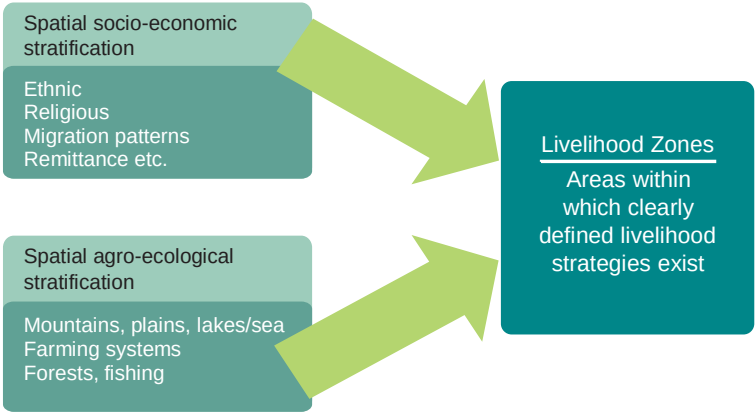
- Agro-ecological zoning undertaken by Ministries of Agriculture in collaboration with development partners; and
- Livelihood zones developed by international agencies in partnership with Governments (see www.wfp.org and www.fews.net and also the Household Economy studies done in several countries by Save The Children UK).

If there are no pre-identified LHZs within which to work, it is possible to develop these in a rapid and participatory way, using key informants. The starting point should be the hazard map identified earlier with key informants, with a focus on livelihood types in those areas particularly at risk from the hazard. Discussions should be initiated around different livelihood patterns in different parts of the affected area(s).

One useful way to get discussion going is to focus on issues such as:

- Altitude and topography;
- Population density;
- Social and ethnic groups; and
- Main sources of food and income – livelihood activities (this may include types of employment; crops grown – main cash crops, food crops, livestock types).

Figure 2: Livelihood zones



Through this process, spatial livelihood pattern distinctions will become clear. Experience in Malawi and Zambia has demonstrated that if carried out with knowledgeable informants and with very basic – or no maps, rough but adequate livelihood zoning can be prepared in a matter of a couple of hours. The process of developing the zones produces a lot of useful information on characteristics of livelihoods in different areas.

Developing zones for those most vulnerable to natural hazards in **urban areas** may not be as straight forward as in rural areas, although it may be possible to use geographical definitions of slum areas to define the relevant area of investigation.

3.2 Livelihood profiling within livelihood zones

Once the livelihood zones have been delineated, the next step is to understand the living conditions, livelihoods, wealth and vulnerability of people living within the zone. This livelihood profiling should be done using a mixture of qualitative and quantitative information.

It is probable that administrative areas and availability of secondary information do not share the same boundaries as livelihood zones. Judgement is required to select the most appropriate units of analysis and coverage for the available data. A better 'fit' may be obtained if access to the micro data and original database files is possible.

In addition to existing quantitative and qualitative data, it is highly likely that some fieldwork will be required to get a good understanding of livelihoods. How this is done will depend upon circumstances including availability of secondary information and studies. At the very least, it is likely to involve some "ground-truthing". The existence of livelihood zones will help the baseline team in choosing locations for field visits. The number of field visits required to gain a good idea of livelihoods, wealth and vulnerability will vary according to circumstances and there are no hard and fast rules on sampling methodology.

3.2.1 Quantitative information from census and surveys

The necessary quantitative information is normally available from census data (although some re-analysis may be necessary). This information can be arranged in different ways. One way is to arrange it according to the various livelihood assets, and this is the way in which this section has been laid out. Another way of arranging the data is along more traditional sectoral lines through use of such headings as "Agriculture", "Employment" , "Non-earned Income" and "Health". Either way, the actual data collected will be the same. The following categories of information will be useful:

Health status

The key health indicators should relate to the ability of the population in the area at risk to make a living.

Two types of indicators are particularly important:

- Percent of people of working age (15-64) with reduced capacity for work due to physical or mental disabilities; and
- Incidence of common diseases which reduce working capacity. These will vary according to the country and area concerned. Key common diseases will probably include Malaria and may include others such as HIV/AIDS, Degue fever, and Acute Respiratory Infection.

Sources for this information will include Demographic and Health Surveys (DHS) (see www.measuredhs.com), and local health surveys undertaken in areas at risk.

Physical assets

Physical assets enhance people's capabilities to live and to make a living. They can be privately owned by households (such as dwellings, tools, livestock or farm infrastructure) or they may be public assets accessed by households, such as roads, irrigation reservoirs and major canals, or electricity networks.

Privately owned physical assets

The number and quality of **dwellings** emerges normally from population census, which are usually population *and housing* censuses. These may take the form of a list of villages or settlements with an indication of the number of households and families, plus tables on building materials and the condition of houses. If the census is dated, another source would be household surveys. **Table 2** in the statistical annex section (section 7) shows the type of information that would be required.

The number of **livestock** is an important piece of information that is normally absent from population censuses. It comes usually from household surveys or agricultural censuses. Number of poultry in urban households is not likely to be registered in either demographic or agricultural censuses, but may be recorded in some household surveys. **Table 3** in section 7 shows how such information could be presented.

In addition to this it will be important to enumerate other types of physical assets necessary for making a living in the area. The availability of information on **private businesses and equipment** will vary. Relevant sources will include: Ministry of Agriculture, Ministry of Commerce and Trade, United Nations Industrial Development Organization (UNIDO), ILO and FAO offices. **Table 4** in section 7 shows how such information could be presented. This should be adapted to the area in question.

Public and communal physical and natural assets

The key asset types here are: roads, electricity, water (including large scale irrigation schemes) and telephone (landline and cellular). These should be mapped if possible on to the main hazard map (see Fig. 1).

Natural Assets

The main privately-owned natural asset is land, especially **arable land**. Some farmers have **access** to arable land through private ownership, others through

some kind of **tenancy** (sharecropping, fixed rent or other forms) and others through **communal** tenure. In many countries, grazing areas accessible to poor rural households are **commons**, e.g. public or communal property collectively used by many livestock owners, though some grazing land may be under private property (especially in large estates).

Besides land, another key natural resource for livelihoods is **water**. Water for agricultural use is mainly obtained in two forms: directly from rainfall (rain-fed agriculture) or through some form of irrigation. Irrigation may come from rivers, natural springs or other underground sources, and may depend on rainfall upstream or snowfall in mountains during the preceding winter. The flow of water through a territory depends mainly on slope and is organized in **watersheds**. Rainfall and snowfall in a watershed ultimately flows into surface and underground streams, usually draining into the sea. Major watersheds (also called major river systems) are divided into medium-level and micro watersheds. Water is also an important source of livelihood for people engaged in **fishing** on the coats or inland.

Forest land is another important type of natural capital and may be privately, communally or state owned.

Understanding the range of natural capital in an area at risk and the different forms of access to that capital (tenure) contributes to our understanding of livelihood, especially in rural areas.

Key sources of information

Information on the natural resource base of the area of interest is to be found in existing studies on agro-ecological zones, soil maps, land use, land cover, and climate. Description of each agro-ecological zone usually involves data on topography; watersheds; soils; annual rainfall (total and seasonal distribution); temperature range by season; aptitude of soils for rain-fed or irrigated crops, grazing, natural forest or other uses.

At the level of households, natural resource assets owned or accessed by each farm household are mostly found in Agricultural Censuses and Agricultural Surveys, and also in Livelihood studies. Even if the latter are mostly qualitative in nature, they may contain average land holdings, descriptions of climate and agro-ecological zoning and other relevant information.

Some useful sources:

1. FAO world soil map.
2. IWMI/CGIAR world water map.
3. Local land use, watershed, agro-ecological zoning and other maps.
4. Local meteorological statistics.
5. http://www.fews.net.

Tables 5 (Land use), **6(a)** (Land sizes cultivated), **6(b)** (Land tenure types), and **Table 7** (Agricultural output) in section 7 are core tables for the baseline in rural areas. Key watersheds should be mapped onto the main hazard map (see Fig. 1).

Poverty and income

Information on poverty and income levels in the areas at risk are important indicators of likely vulnerability. Information may be available from Poverty and Income and Expenditure surveys. World Bank Living Standard Measurement Surveys are a useful source of information on these issues. **Table 8** in section 7, sets out some basic parameters.

Livelihood strategies

Information on ways of making a living are clearly central to the baseline. The most important tables in this regard are those which show different employment types. Within this, the following indicators and parameters are critical:

- **(Un)Employment** figures disaggregated by sex and age group (population, working-age population, population of working age not active, labour force, employment, open unemployment, employment-to-population ratio);
- **Employment** figures disaggregated **by occupational category** disaggregated by age and sex (Wage and salaried workers, Own-account workers with and without employees, Contributing family workers);
- **Employment** figures disaggregated **by sector**: Agriculture and fisheries, Mining, Timber and Forestry, Construction, Industries, Services;
- **Average Wage and Earnings for "tracker" occupations** disaggregated by sex;
- **Informal-economy** estimated figures, analysis by sex and age group by sector; and profile of the informal activities.

Tables 9(a), 9(b), 9(c) and 9(d) in section 7 are examples of tables displaying the first four categories above. The final category - informal economy, is more difficult to capture in standard government statistics and surveys. Some specific studies may exist and these should be used. If this is not the case then estimates of informal activity will need to be made through the fieldwork.

In terms of key sources of such information, baseline data on employment and the labour market are collected from different sources:

- latest available Population Census (labour participation and employment, sectoral structure of employment, main source of income by district);
- latest available Economic Census (number of micro and macro establishments and number of persons engaged by sector and district);
- latest available Labour Force Survey (LFS), generally done periodically by the CSO.

In the case data sources are outdated, employment figures in the censuses are updated district-wise using growth rates. LFSs are more carefully oriented towards the measurement of employment, and are believed to capture better some sections of the labour force that are usually not well revealed in the census (e.g. female unpaid family help, especially in agriculture). LFSs are not always available at sub-district level for the composition of employment in terms of sectors, categories, age groups or other variables, however, in such cases access to LFS raw data should be sought.

In addition to employment data, information on transfers of money and food are also important for an understanding of baseline livelihood strategies. **Table 10** in section 7 is a guide to what should be presented.

3.2.2 Qualitative information available from studies and/or derived from PRA fieldwork by the baseline team

For the purposes of livelihood profiling, livelihood/wealth categorization is a key contribution from qualitative sources. In some cases, such categorizations will have been done through other studies. Here, the role of the baseline team is to

ground truth the categorizations in a few locations. In those cases where similar work has not been done, then the team will need to do this, by selecting a small number of locations in each of the livelihood zones identified and conducting a livelihood/wealth categorization exercise with key informants. This process can be repeated and validated with stakeholders at higher administrative levels (e.g. district) to make sure that the categories and proportions are representative of the whole area at risk and not just particular locations.

It should be noted that this process can be used for the urban poor in areas at risk as well as urban areas.

Example Process:

1. The baseline team should gather a group of key informants together at the relevant administrative level. This may be a village, or a local council office. For urban areas it could be a market place in the town or at the municipal office. The key informants should be people who are able to speak accurately and with authority about vulnerability and livelihood in their area. At a district level this is likely to include local government officials and NGO representatives. For an urban centre this could include: relevant municipal counsellors and representatives, residents association representatives and NGO representatives. At a village level it might include the leadership of the village, members of community-based organizations, school teachers.

2. A wealth/livelihood categorization would then be done using standard PRA techniques. This involves the following steps:

   a) Searching for differences within the population with regard to poverty and wealth with questions such as "how would I know if I saw a well-off person in this area? What would he/she be wearing? How many cattle, what kind of house, how much land, how much livestock, what would be the likely occupation(s) of such a person?"

   b) These questions should be repeated for very poor groups and then groups which are neither rich nor poor.

c) Once the list of characteristics for different groups has been obtained then the proportions of households falling into each category should be quantified. This can be done in various ways. It is recommended that a consistent method is used throughout. A common method is to take 100 beans/grains/stones and ask key informants to distribute across the different categories.

3. The results of this exercise can be arranged in the following format:

Livelihood group	Characteristics	Wealth and vulnerability status	Proportion in overall population
	•		
	•		
	•		

Example output:

An example of a rural livelihood categorization and wealth ranking exercise done as part of a livelihood baseline is given in the following table.

Livelihood group	Characteristics	Wealth and vulnerability status	Proportion in the overall population
Large land owners with livestock	• 20-80 acres land • 15-20 cows • 50-70 goats • 1-2 Camels • Hire share croppers • A few in govt. service • Some involved in shop keeping/trading	Better off	10%
Medium land owners with livestock	• 5-20 acres own land • 3 cows • 20-50 sheep/goats • Daily wage labour, some seasonal migration and some also work as labour in Karachi • Only few in govt. service • Few shopkeepers/traders	Middle	40%

cont./

Small land owners some small livestock plus sharecropping	• 3 – 5 acres share cropping land • 2 sheep/goats • At least one member seasonal migration to irrigated areas. • 50% of hh also work as wage labour locally/garments and cities • Tailoring (10 women)	Poor	30%
Landless poor	• May own 2-3 goats on share basis • Undertake herding of livestock • Undertake mud plastering (women) • Undertake wood cutting/selling • Reliance on Charity • Reliance on Child labour • Most widows are in this group	Very poor	20%

Section 4: Seasonal Impact and Response Calendars

This is an important part of the livelihood baseline for all types of natural hazards, and particularly those which are predictable in terms of when during the year they strike. This applies to hydro-metereological hazards such as tropical storms/cyclones/hurricanes/typhoons, droughts and floods.

An understanding of the seasonality of livelihood activities, together with an appreciation of when hazards are likely to strike in the year and how people have historically coped with these hazards, will give important pointers as to what is likely to be required in terms of response and when responses should be activated.

Process:

As for the livelihood categorization and wealth ranking, the seasonal calendar work should be done at different levels so that it can be triangulated. The construction of a seasonal calendar is simple enough. consisting of the following steps:

a) Draw an empty calendar on a flip chart as below.

Activities	J	F	M	A	M	J	J	A	S	O	N	D

b) Working with the key informants, fill in the calendar with the relevant activities which are done by households in the area in question. Depending on the 'level' of the key informants, this could be a village, or part of a district corresponding to a particular livelihood zone or a whole district or livelihood zone.

c) 'Impose' the impact of the hazard on the livelihood calendar and ask about coping strategies: How do households cope with the impact of the hazard? What are their strategies and when do these take place in relation to the hazard?

d) Identify intervention points with the key informants. What kinds of interventions would protect livelihoods and assets and would speed the recovery process? When should they be introduced?

Example output:

The following calendars were derived from fieldwork undertaken in Pakistan in March 2008.

a) 'Normal' year

Activities	J	F	M	A	M	J	J	A	S	O	N	D
Pre-season loans		X	X									
Crop cultivation[1]						X	X	X				
Loan for food									X	X		
Bajra harvest											X	X
Guar, moat harvest	X											
Pulses, melon, tinda harvest									X	X	X	
Grass collection for fodder							X	X			X	
Livestock sales								H	H		H	H
Food stocks available (middle wealth group and above)	X	X	X	X							X	X
Food stocks (poor)	X										X	X
Sharecropper labour: • Harvesting • Planting / weeding	X					X	X	X		X	X	X

cont./

1 Bajra, Guar, Moat, Sesame, Pulses, Melons and Tinka.

Migration to barrage area • With livestock • Without	X X	X X	X X	L X	L X							
Migration to sugarcane areas in north of district											X	X
Carpet loom labour	X	X	X	X	X	X						
City labour outside Tharparkar[2]	X	X	X	X	X	L	L	L	X	X	X	X
City labour inside Tharparkar • Daily labour in nearest centre • Labour in other centres		 X	X X	X X	X X	X X						

Key: L = low, H = high, X = activity taking place.

Explanation:

In a normal year, the population in the area at risk are involved in multiple livelihood strategies to obtain sufficient food and income. Crop cultivation is an important set of activities from which a modest harvest is derived. For the poorer groups, the harvest normally runs out in January, when different types of agricultural and non-agricultural labour take over as the main sources of food and income. There is significant labour migration to other parts of the district. Some of the migration is dual purpose: men travel with their cattle to do labouring jobs and to feed their cattle in irrigated areas of the district. Other types of labour are unskilled work in urban areas, and skilled work (often done by children) in carpet looms in the villages.

The 'normal' year chart changes fundamentally after a serious drought, as indicated in the seasonal calendar on the following page.

2 Mainly in Karachi and Hyderabad.

b) Drought year

	Impacts and coping strategies continue					Drought period			Impacts felt and coping strategies start			
Activities	J	F	M	A	M	J	J	A	S	O	N	D
Pre-season loans		X	X		7							
Land preparation[3]						X	X	X				
Loan for food									H 1	H		
Bajra harvest											?/-[4]	?/-
Guar, moat harvest	?/-											
Pulses, melon, tinda harvest									?/-	?/-	?/-	
Grass collection for fodder							?	8		4	?/-	
Livestock sales	X	X	X	X	X			H	H 3	H	H	H
Food stocks (middle and above)									?/-	?/-	5	
Food stocks (poor)									1	-		
Sharecropper labour: • Harvesting • Planting / weeding	-					X	X	X		-	-	-
Migration to barrage area • With livestock • Without	X X	X X	X X	X	X					X	X	X
Migration to sugarcane areas in the north of the district											X	X
Carpet loom labour	H	H	H	H	H	X			H	H	H	H
City labour outside Tharparkar[5]	H	H	H	H	H	L	L	L	H	H	H 6	H
City labour inside Tharparkar • Daily labour in nearest centre • Labour in other centres		 H	H H	H H	H H	X X			H	H	H 6	H
Distress loan for migration and family support									X 2	X	X	

Explanation:

After a serious drought, there are a number of significant changes in livelihood strategies. The first impact of the drought is no or drastically reduced harvests, coupled with no or drastically reduced fodder availability. To try and cope with this, households – particularly the poorer ones – are forced to take out distress loans to purchase food and to finance migration. Livestock sales also increase in an attempt to raise food and income. There is a huge increase in labour related livelihood activities, both in the locality of the drought affected area (increase in carpet weaving) but more importantly in terms of migrant labour, particularly to the local and more distant urban centres, and to the irrigated area in the far west of the district.

This change in livelihood patterns, caused by the hazard, implies various intervention points as depicted on the second seasonal calendar. These points were derived through discussions with different groups of key informants at village, sub-district and district levels.

Key to intervention points (see blue boxes in seasonal calendar).

= Intervention point in sequence – i.e. 1 is first, 2 is second etc.

1 = Support to food consumption of poor groups.
2 = Cash grants to distressed families to reduce need for further indebtedness.
3 = Veterinary support for livestock diseases.
4 = Fodder support (either from pre-existing fodder stores – built as part of disaster preparedness – or bringing in fodder from other districts).
5 = Support to food consumption of non-poor groups.
6 = Support to labour opportunities for distress migrants in urban centres.
7 = Provision of high quality seed and fertilizers on credit (following calendar year).
8 = Livestock restocking (following calendar year – when grass is plentiful - assuming there is rain the following year).

3 Bajra, Guar, Moat, Sesame, Pulses, Melons and Tinka.
4 ?/- = little or nothing.
5 Mainly in Karachi and Hyderabad.

Section 5: Response Typologies

This section gives likely scenarios in terms of numbers of people likely to be affected by hazards[1], together with probable livelihood support needs, quantified as much as possible.

Completing this part of the baseline requires that qualitative and quantitative data are combined. The process by which this is done is very important as it will determine the extent to which the typologies are taken seriously and used by relevant stakeholders in the event of a natural disaster.

Possible process:

Once the seasonal calendars have been completed and validated by the relevant stakeholders, a matrix of intervention points should be drawn up as follows:

Type of response	Geog. area	# of households likely to be affected			Req. quantity	Duration	Responsibility
		Livelihood Group 1	L'hood Group 2	L'hood Group 3			

For each intervention point/type of response, expert opinion should be sought so that the correct intervention types and amounts can be proposed. The opinion is likely to be at different levels and from different agencies. Some degree of triangulation will be required to reach commonly accepted intervention types and amounts.

1 One possibility here is to have different scenarios e.g. (a) moderate flooding; and (b) severe flooding.

Example:

Following on from the seasonal calendar shown in the previous section, the following *Livelihood-based Contingency Plan* was derived after a consultative process in Pakistan.

Rural Livelihood-based Contingency Plan for Flash Floods in High Risk Union Councils in Bagh district, Pakistan

Type of response	Union Councils and % of Households in UCs	# of hh likely to be affected	Required quantity	Amount (USD)	Duration	Responsibility
1. Food support (USD 60/hh)	40% of hhs in the 5 high risk UCs.	5108	5108 food packages*	306,480	1 month (August/ September soon after flood)	WFP/ NGOs/ Government
2. Kitchen utensils (one set @ USD 40/hh)	40% of hhs in the 5 high risk UCs.	5108	5108 sets	204,320	August/ September	INGOs
3. Compound feed for livestock (1 buffalo/cow/ hh) 5 kg/day for 30 days Feed for 1 cow/buffalo/hh	40% of hhs in the 5 high risk UCs.	5108x5x30 =766200 Kg	766 tonnes	191,550	August - September	FAO/NGOs/ bilateral donors
4. Veterinary support for livestock 2 animals/hhs diseases (@ 40 cents/ animal)	100% of hhs in the 5 high risk UCs	25540 animals	25540 animal vaccinations	10,216	August	FAO/NGOs/ bilateral donors

cont./

5. Support for agri. small tools (USD 50/hh)	40% of hhs in the 5 high risk UCs.	5108	5108 sets	255,400	October	FAO/NGOs/ bilateral donors
6. Wheat seed (for 2 kanals/ hh) 7.5 kg/kanal @ 50 cents/kg Urea 10 kg @ 45 cents/kg DAP 10 kg @ 1 USD/kg	40% of hhs in the 5 high risk UCs.	5108x2x7.5 =76620 kg 5108x210 = 102160 kg 5108x2x10 = 102160 kg	Wheat seed: 77 tonnes USD 38,310 Urea: USD 45,972 DAP: USD 120,160 Urea 102 tonnes DAP 102 tonnes	2,204,442	October/ November	FAO/NGOs/ bilateral donors
7. Maize Seed 6 kg per kanal/hh @ 50 cents/kg Urea 5 kg/kanal @ 45 cents/kg NP 13 kg/kanal @ 1 USD/kg	40% of hhs in the 5 high risk UCs.	5108x2x6 = 61296 5108x2x5 =51080 5108x2x13 =132808	Seed 61 tonnes USD 30,500 Urea 51 tonnes USD 22,986 NP 133 tonnes USD 132,808	186,294	March	FAO/INGOs/ bilateral donors
8. Kitchen Gardening package @ 10 USD/hh	40% of hhs in the 5 high risk UCs.	5108x10	5108 packages	51,080	October and March	
9. Restocking of small ruminants (1 shoat per hh) @ USD 70/shoat	40% of hhs in the 5 high risk UCs.	5108	5108 goats	357,560	February-March	FAO/NGOs/ bilateral donors

cont./

10. Restocking of cattle (1 cow/hh) @ USD 645 (1 buffalo/hh) @ USD 1,129	20% of hhs in the 5 high risk UCs	2554 hh for cows 2554 hh for buffalo	5108 (half cows + half buffalo)	1,647,330	February-March	FAO/INGOs/ UN bilateral donors
Total Support (USD)				5,414,672		

Group 1 = Small landowners cum tenants
Group 2 = Landless.

* *Food package per household for one month includes the following items: Rice: 20kg; lentils: 5kg; oil: 5kg; wheat flour: 60kg; sugar: 2kg; tea: 1kg; iodized salt: 2kg; and red chillies: 0.5kg.*

** *400 grams/hh for two goats/day for 30 days.*

*** *Seed quantity to each hh for 7 acres, which includes guar seed: 20kg; millet seed: 5kg; and lentil seed: 5kg.*

It should be noted that this matrix is incomplete as it does not include support to distress labour migrants in urban areas.

The information required to compile the matrix came directly from the qualitative and the quantitative aspects of the baseline.

The key qualitative aspects were:

- Hazard mapping;
- Livelihood profiling; and
- Seasonal calendar development.

The key quantitative aspects were:

- Population data – derived from 1998 population census which was then updated;
- Livestock census data; and
- Annual crop estimates data (for hectarages and yields used to derive seed estimates).

Section 6: Institutions for Livelihood Support

The baseline should give details of those organizations that are able to offer support to the livelihoods of those affected by disaster. Such information will help Government and other agencies to organize the response from a livelihoods point of view.

The critical information to be collected will include:

- Contact details and location;
- Geographical coverage; and
- Types of activities undertaken in areas at risk.

The types of institutions are likely to include:

a) Public and private institutions

- Local government offices;
- Community organizations at settlement level;
- Labour unions and professional organizations;
- Employer or business organizations;
- Cooperatives and other communal enterprises;
- Corporate businesses present in the area;
- NGOs acting in the area;
- Micro-finance institutions;
- Agricultural input suppliers;
- Buyers of agricultural /fisheries products (merchants, industry, etc.); and
- Transportation services (passengers and cargo): number of vehicles, frequency, capacity).

b) Programs and projects operating in the area

Various projects (managed by UN agencies or NGOs, or by the Government) may be operating or have operated recently in the area at risk. Information about the area may be contained in several documents related to those projects and programs, especially:

- Project documents;
- Progress and evaluation reports; and
- Background studies for the project.

c) Vocational training and technical education

- Agricultural schools;
- Agricultural extension services;
- Technical agricultural facilities;
- Technical schools; and
- Vocational training schools/facilities.

In addition, the baseline should seek to give an indication as to how well the communities in the areas at risk are being served by existing institutions. This will help in assessing vulnerability and will also give benchmarks in terms of 'building back better' during post-disaster recovery, reconstruction and monitoring. In some countries, this information has been collected as part of Participatory Poverty Assessments, or in individual surveys. If a population census has been done recently, then relevant information may be found here also. **Table 11** in section 7 gives a format for this kind of information.

Section 7: Socio-economic Tables and Statistics

Introduction

The following tables are suggested for the quantitative elements of the baseline. They are intended to give a general guide and should be adjusted according to circumstances. Having said this, all of the following tables are normally available either from censuses of different kinds or from large surveys which are carried out in most countries at risk. In those cases where the figures are dated – as with the case of population census data from 2000 – it is often possible to update the figures using growth factors that have been agreed with the relevant government statistical bureau.

It should be noted that the tables suggested below have just one column for the area at risk. In practice it may be necessary and appropriate to sub-divide this into different sub-areas.

Table 1(a): Population overview in areas at risk

Parameter	
Area (Sq. Km)	
Number of households** (000)	
Rural	
Urban	
Average hh size*	
Rural	
Urban	
Average growth rate*	
Rural	
Urban	
Number of electoral wards or equivalent	
Number of villages	
Total Population (000)	

Likely source: Population census.

Table 1(b): Rural/urban, sex and age breakdown in areas at risk

Tehsil/District	Male	Female	All
Overall Total (000)			
Under 1 years of age			
1- 4 years of age			
5-14 years of age			
15 - 64 years of age			
Above 64 years of age			
Rural Total (000)			
Under 1 years of age			
1- 4 years of age			
5-14 years of age			
15 - 64 years of age			
Above 64 years of age			
Urban Total (000)			
Under 1 years of age			
1- 4 years of age			
5-14 years of age			
15 - 64 years of age			
Above 64 years of age			

Likely source: Population census.

Table 2: Dwellings in areas at risk

Dwelling type	Percent (%)
cement and tin or tiled roofs	
semi –traditional	
traditional (e.g. mud and thatch)	

Likely source: Population census, housing census.

Table 3: Livestock numbers

	Number of animals	% of hh owning
Cows		
Buffaloes		
Sheep		
Goats		
Camels		
Horses		
Mules		
Ass		
Poultry		

Likely/possible sources: Agricultural/livestock census; individual surveys covering area at risk.

Table 4: Private business equipment

Households with commerce shops	Number	%
Households with workshops (blacksmiths, furniture making, brickyard, etc.)		
Households with fishing boats (large)*		
Households with fishing boats (small)*		
Households using tractor**		
Households owning tractors, trucks, lorries or pickups		
Households with other equipment or facilities generating income (specify):		

Likely/possible sources: Population census, agricultural census, Labour Force Surveys, local Chambers of Commerce records, municipality records, individual surveys covering area at risk.

(*) Only for fishing communities. "Large" or "small" as defined locally.

(**) Only for farming areas where use of tractor is relevant.

Table 5: Land use

Geographical area (Sq. km)	
Reported area (000 ha)	
Cultivable area (000 ha)	
% Rainfed	
% Irrigated	
Uncultivable area (000 ha)	
Forest area (000 ha)	

Likely sources: Agricultural census, GIS data, Ministry of Agriculture statistics and records at local level.

Table 6(a): Land sizes among agricultural households

Farm size	% of hh cultivating	Number of hh
0-0.49 hectares		
0.5-0.99 hectares		
1.0 – 1.99 hectares		
2 – 5 hectares		
5 – 10 hectares		
10 hectares and above		

Likely sources: Agricultural census, Ministry of Agriculture statistics and records at local level individual surveys.

Table 6(b): Land tenure

Land ownership type	% hh	Number
Landlord (renting out land)		
Owner – cultivator		
Tenant (renting in land)		
Share-cropper		
Communal ownership (usufruct)		
Landless		

Likely sources: Agricultural census, Ministry of Agriculture statistics and records at local level individual surveys.

Table 7: Crop estimates

Crop	Hectarage	Yield	Production

Likely sources: Agricultural census, Ministry of Agriculture statistics and records at local level individual surveys.

Table 8: Poverty indicators

Poverty indicator		% hh	Number
Human Development Index			
Income poverty headcount			
Food poverty (kcals per day)			

Likely sources: UNDP Human Development Reports, World Bank Poverty surveys, WFP Comprehensive Food Security and Vulnerability Analysis surveys.

Table 9(a): Overall employment status

	Total	Rural	Urban
Total population (000)			
Population between 15 to 64 years of age (000)			
Total number employed (000)			
Employed population as % of population between 15 to 64 years of age			

Possible sources: Population census, Labour Force Surveys.

Table 9(b): Employment by sector

Sector	No. of employed	% of total employment
Agriculture and forestry		
Mining		
Manufacturing		
Utility		
Construction		
Trade		
Transport etc.		
Finance and business		
Services and Public Admin		
Others		
Total Employed		

Possible sources: Labour Force Surveys, agricultural census, individual studies and surveys.

Table 9 (c): Average wage & earnings for "tracker" occupations by sex in Area X

	Average wages Males (1)	Average wages Females (1)
Occupations:		
- field crop farm worker		
- labourer in construction		
- welder in metal manufacturing		
- apparel sewing-machine operator		
- sales person in grocery retail trade		
- first-level education teacher		
- office clerk		
- hotel receptionist		
- accountant in banking sector		
- computer programmer in insurance		

Possible sources: Labour Force Surveys, agricultural census, individual studies and surveys, Livelihood Baseline and Contingency Plan field work.

(1) This may be expressed in nominal terms in local currency, as hourly, daily, weekly or monthly rates or as an index, depending on the level of analysis done in surveys and labour censuses.

Table 9(d): Households by normal main source of income

Main source of income	Numbers in areas at risk	% of total
Farming		
Fishing		
Subtotal agricultural producers		
Agricultural wage labour		
Subtotal agriculture		
Other wage labour		
Subtotal wage labour		
Industry, construction		
Commerce, transport, services		
Subtotal non-agricultural business		
Remittances		
Rent		
Total		

Possible sources: Income and Expenditure surveys,
WFP Comprehensive Food Security and Vulnerability Analysis surveys.

Table 10: Remittances, Food and Non-Food Transfers

Sources	Number of households receiving in areas at risk
Remittances	
State pensions	
Other state benefits (e.g. food stamps)	
Food aid	

Possible sources: Income and Expenditure surveys,
WFP Comprehensive Food Security and Vulnerability Analysis surveys.

Table 11: Access to services provided by public and private institutions

Facility	% use					Quality of service (those who used)		
	Not at all	Occasional	Often	All the time	Total	% Not Satisfied	% Satisfied	Total
Family planning								
School (prim, mid, high)								
Veterinary								
Ag. Ext								
Police								
Bank								
Road								
Drinking water								
Canal								
T. well								
Open well								
Bus								
Railways								
Postal								
Telecom								

Possible sources: Participatory Poverty Assessments, individual surveys and recently completed population census.

Section 8: Table of Contents for a Livelihood Baseline and Contingency Plan

The following table of contents is an example. It can be used as a general guide and adapted according to circumstances.

VOLUME 3

Initial Livelihood Impact Appraisal

The Livelihood Assessment Tool-kit

Analysing and responding to the impact of disasters on the livelihoods of people

Volume 3:
Initial Livelihood Impact Appraisal

[First Edition]

Published by
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and
International Labour Organization (ILO), Geneva

TABLE OF CONTENTS

Section 1: Introduction

1.1 Objectives and scope of the ILIA

The Initial Livelihood Impact Appraisal (ILIA) is primarily designed to generate a credible and well justified picture of the current and likely impact on livelihoods of a sudden-onset natural disaster. The ILIA will feed into the Flash Appeal, which is normally issued between 72 hours and 10 days after the natural disaster event(s).

The ILIA is a second step after the compilation of a **Livelihood Baseline** (LB - see Volume 2). If a baseline was not conducted in the pre-disaster period, then a 'Good Enough' baseline becomes part of the ILIA.

A specific requirement of the ILIA is to build up a first layer of data analysis to allow the authorities to take informed decisions and to also allow the formulation of the first immediate projects to be presented into the Flash Appeal. The ILIA will also set the basis for the further analysis and the elaboration of a more detailed fully-fledged livelihood recovery response plan to be constructed for the following Appeal (see Volume 4). A further objective of the ILIA is to identify areas and issues for more detailed follow-up in a subsequent **Detailed Livelihood Assessment** (DLA).

The risk of livelihood failure as the result of a natural hazard event is a function of:

- the severity of the event;
- exposure to the event; and
- vulnerability to the event.

Therefore, the ILIA has to be able to estimate each of these three elements. In addition, the ILIA should recommend options for livelihood recovery. Thus the ILIA should have *severity*, *exposure*, *livelihood impact* and *recovery* elements.

The *severity* of the event is measured by (e.g.) data on rainfall, wind-speed, Richter-scale magnitude (for an earthquake) etc. The *degree of exposure* to the event is measured by the size and location of particular geographical areas and numbers of population in such areas. *Vulnerability of livelihoods* to the event

in those exposed areas / amongst those exposed populations will depend on livelihood types and poverty, and this will often vary according to demographic variables such as gender, age and ethnicity. Prospects for *recovery* will also be influenced by the actual or likely presence of external support (e.g. local and international non-governmental organizations [NGOs], local and central government).

Assessment context for the ILIA: the need for coordination

In most cases after a natural disaster there will be an inter-agency assessment organized by the United Nations (UN) country team, with or without the assistance of a UN Disaster Assessment and Coordination team or an Office for the Coordination of Humanitarian Affairs (OCHA) team. The ILIA can constitute the livelihood element of the inter-agency assessment, and will need to be coordinated with the other aspects of the inter-agency assessment process.

One very important fact to be considered is that there will be a plethora of assessment teams in operation soon after the disaster strikes, aiming to get information as soon as possible to feed into initial assessment documents and appeals – including the flash appeal. Owing to time pressures, there will be a tendency for different teams to visit communities in the same areas. If the ILIA is to include fieldwork (and it might not – see below), then it is *absolutely critical* that there is *coordination* with other actors to ensure that particular communities and districts are not overwhelmed by different assessment teams.

Whom are these guidelines aimed at?

These ILIA guidelines are aimed at all those people who would normally be expected to participate in post-disaster needs assessments at the country level. This may include line ministry staff, national and international UN staff, national and international consultants and NGO staff. Some of these people will be able to use the guidelines with minimal or no training, whilst others will need to be trained first.

1.2 The mechanics of conducting a ILIA

There are two basic types of ILIA: with and without field visits. When field visits are *not* possible - due to extreme time pressure to produce a Flash Appeal and /or when it is physically impossible to travel to the disaster area(s) – the ILIA is based *entirely on livelihood baseline information and reported information on exposure and damage*. From these two pillars, the ILIA generates a livelihood impact extrapolation followed by an indicative livelihood recovery response plan.

When field visits *are* possible, these are done either as part of an inter-agency assessment process or as a stand-alone process. The length and depth of the field investigations will depend upon circumstances and these guidelines give some options which can be adapted to individual situations. This second type of ILIA draws on baseline and exposure information to derive working hypotheses about vulnerability and livelihood impacts which are then "tested" and elaborated through rapid ground truthing. In some cases, livelihood baseline information will have already been collected prior to the event, whereas in other cases, it will be necessary to conduct a "Good Enough" baseline exercise as part of the ILIA itself. If field visits are possible, it is advisable that the exercise be conducted by two small teams: one in the capital town to analyse relevant secondary data and information, and *the other* team undertaking field visits as much as possible.

1.3 The key elements of the ILIA

As noted earlier, the degree of field investigation in ILIA will depend entirely on circumstances – principally time and accessibility. The following table represents the range of enquiry that the ILIA may undertake. The minimal scenario when there is very little time and / or accessibility would be the secondary data and national level key informant level. The maximal scenario would involve investigations at all of the levels shown in the table overleaf.

Level	Information
Secondary data and national level key informants	• Pre-disaster livelihood baseline data collection (if no pre-existent baseline). • Initial severity and exposure information – size of the shock(s) numbers and locations of those affected. • Support and recovery information - institutions, projects which may be able to offer support to affected populations. • Livelihood impact extrapolation (if no fieldwork is possible)
Provincial / district / area level	• Impact of the disaster on the local economy, general impact of the disaster on the livelihoods of people in the area and prospects for recovery • Employment intensive investment opportunities
Market trader / shop keeper	• Current market availability and prices for essential commodities; • Likely availability and price trends
Community level key informants	• focus on the "average" and the "poorer" households; • the most important livelihood activities in the community and when these take place in the year; • the overall impact of the disaster on livelihood activities; • current responses ; • the potential role of community groups in livelihood recovery; • high priority livelihood recovery needs of the community, households, men and women.
Individuals	• focus on the "poorer" households; • the most important *sources of livelihood* and expenditure for the household before the disaster; • the *impact of the disaster* on the assets and livelihood activities of the household; • livelihood coping strategies; • the *main short and longer-term priorities and needs*.

Section 2: Initial Secondary Information Collection

Why:	To provide the basis for initial livelihood impact estimation
When:	The first days after a disaster strikes
What:	Available information on (i) the underlying pre-disaster livelihoods of affected populations (baseline); (ii) magnitude of the disaster, areas and populations exposed to the disaster; and (iii) possible sources of livelihood recovery support for affected communities.
Who:	ILIA team

2.1 Pre-disaster livelihood baseline data collection

From a conceptual point of view, the first step of the ILIA is to understand the pre-disaster situation in the affected area(s). There are two possibilities in this regard. The first is where there is *already* a livelihood baseline (LB) for the areas affected by the disaster (see Volume 2 - **Livelihood Baseline**). In this case, the information contained in the baseline should be combined with the magnitude and exposure information (see section 2.2) to derive a livelihood impact estimate. The second possibility is where there is no pre-existing baseline and therefore relevant information has to be collected on the spot, at the same time as the exposure and damage information ("Good Enough" method).

Baseline data is needed in order to help estimate the magnitude of the impact on livelihoods. The key aspects of baseline data needed will include:

1. *General description* of the affected area (typically a region / province / district) pre-disaster. This will include an overall picture of issues such as topography, communication networks, population size, basic economic and social structure.
2. *Age and sex population breakdowns:* Description of the pre-disaster demographic characteristics of the populations in the affected areas.
3. *Pre-disaster Livelihood profiling:* The key secondary data to be collected and analysed will be concerned with various aspects of the pre-disaster livelihoods - particularly on agriculture and employment for rural areas and various aspects of employment for urban areas. It will include the following:

- "normal" livelihood activities for the area and time of year (farming, fishing, wage labour etc.) "normal" livelihood activities for the area and time of year (farming, fishing, wage labour, self-employment, etc.) and numbers of people involved in these activities.
- Within these categories, it is also important to understand the specific types of economic activity (e.g. types of food crops grown, types of commercial crops grown, livestock numbers, small business numbers and types, types of manufacturing plants).
- For employment data, key parameters include: **(un)employment** figures disaggregated by sex and age group; **employment** figures disaggregated **by occupational category** disaggregated by age and sex **employment** figures disaggregated **by sector and measures of key occupational wages** and **salaries** disaggregated by sector and occupation[1].

Key sources of such types of baseline data include:

- Government census data and reports
- Official statistics for the area (from the Central or local Statistical Office)
- Statistical surveys from government ministries, universities, NGOs, UN agencies or International Funding Institutions (IFI);
- Socio-economic, political and historical studies by research groups, government or university;
- Data and information from Chambers of Commerce and Industry, professional associations, workers' and Employers associations;
- Existing geographic information systems in the area, if any;
- Relevant UN information (from the various relevant agencies, chiefly United Nations Development Programme, FAO, ILO, World Health Organization, United Nations Children's Fund and United Nations Educational, Scientific and Cultural Organization);
- Reliefweb web site: www.reliefweb.org;
- Existing FEWSNET livelihoods maps of the country; www.fews.net;
- National or regional disaster-preparedness plans.

1 More detailed information on livelihood baseline data including what to collect and how to present it can be found in Volume 2: Livelihood Baseline and Contingency Plan.

More detailed information on livelihood baseline data including what to collect and how to present it can be found in Volume 2: Livelihood Baseline and Contingency Plan – in particular section 3.2.1 and the tables in section 7. The extent to which the guidance in Volume 2 can be followed will depend on time and resources available for the ILIA.

2.2 Initial severity and exposure information

At the same time that baseline data is being collected, it will be important to gather information on the magnitude and location of the event(s) and the populations exposed. This intelligence may come from many of the same sources which provide baseline information. In this regard, the National Government Disaster Management Agency/Ministry, UNOSAT, OCHA, Press, Radio and Television bulletins will be important. The key questions here are:

- What is the nature, extent and magnitude of the shock/crisis?
- What geographical areas have been affected?
- How have they been affected? (e.g. hectares of agric land destroyed, estimates of tonnes of production lost, numbers of cattle killed, factories destroyed, shops collapsed, areas of informal trade destroyed, value of these losses).
- Which groups of people have been affected (livelihood types: for example small-holder farmers, wage workers, self-employed workers or entrepreneurs) and numbers – see section 2.2.1 for more details.
- What is the current information and knowledge on level of disruption to livelihood activities (including market disruptions)[2]?
- How are people coping with the disaster? (including increased demand for jobs) – see section 2.2.1 for more details.

NOTE: Initial hypotheses on impact can usefully be informed by the 'typical effects' of different kinds of disaster shown in Annex 2.

2.2.1 Initial estimates of impact of disaster on livelihood and employment

a) *Employment losses*. Loss of jobs can be estimated in a more or less straightforward way, based on the number of closed businesses, lost fishing boats and other

similar damage caused by the disaster. Without going to the field, the ILIA team will need to rely on Government / UN / NGO early assessments of the disaster impact, and (if possible) remote discussions (by email and telephone) with key informants on the ground in affected areas. Further details can be gained through subsequent fieldwork (if this is possible).

Employment losses include:

- Wage workers dismissed or suspended without remuneration
- Self-employed workers or entrepreneurs, or their family help, who cannot work because they have lost their capital (infrastructure, equipment, or working capital –such as raw materials or intermediate and finished products) or cannot use it due to destroyed roads, lack of electricity in the area, or other kinds of disaster damage.

b) *Additional demand for jobs*. Besides the loss of existing jobs, there is also another kind of impact on the labour market as more people may be seeking casual jobs due to loss of their usual employment. This additional supply of labour includes people already in the labour force (e.g. small farmers who lost their harvest, or fisherfolk who lost their boats) or people formerly outside the labour force (e.g. members of those farmers' or fisherfolk's families). Additional demand for jobs can only be estimated in an approximate way. Again, if field work is not possible the ILIA team will have to make do with discussions with ley informants at national level and via telephone / email (if functioning) to informants in the field.

Through answering these questions, a picture of the **two-sided impact** of the disaster on the various kinds of employment will start to emerge. The first side is **employment losses** (number of people whose jobs and income were lost); whereas the second side is **additional demand for jobs** (number of people who resort to the labour market to make up for severe livelihood and income losses). *Further details of issues to be taken into account in this regard, together with some tips for simple calculations, are given in Annex 2.*

2.3 Mapping agency capacity for relief and recovery

One other important element of initial data gathering concerns actual and possible sources of *support* for affected populations. This will help determine the magnitude and need for additional support through the flash appeal, as well as potential partners. Whilst an understanding of livelihoods will include likely coping capacity, this is not the same thing as mapping the actual and possible capacity of non-UN agencies to support livelihood recovery. Clearly, time will be very short and it will not be possible to compile an inventory from disparate sources, thus progress in collecting this information will depend on how centralised and comprehensive it is. Notwithstanding this, key issues and possible sources of information are indicated in the following table:

Section 3: Field Visits

Why:	(i) To ground-truth working hypotheses derived from initial livelihood impact data. (ii) To get a first hand understanding of livelihood impact and recovery priorities.
How long:	Duration of field work variable between 1 day and one week.
What:	Selective visits to district level authorities and where feasible to (a) Settlement level key informants (b) individual households in the affected area.
How:	Preferably as part of an inter-agency assessment process.
Who:	ILIA team, which would consist at least of UN staff / national consultants plus government representation. *Due to time limitations, it may be necessary to split the ILIA team so that part of the team stays in the capital city to gather an analyse key secondary data and gather information from key informants whist the other part goes to the field.*

3.1 Structure of field visits

Time and key objectives

The site selection and sampling process will depend heavily on time available for field visits. A minimal scenario would be a one day visit to the district / regional / provincial offices in the affected areas with a possible visit to the main market. On the assumption that the maximum time available for a field visit would be one week; that the ILIA fieldwork team would be small and mobile – perhaps consisting of 3-4 trained persons; and that the time for analysis would be extremely compressed – perhaps no more than one day, it would be unlikely that much more than three district level visits, plus perhaps three to five village level consultations, will be possible.

In general terms, the minimal objective of the field work is to provide some degree of "ground truthing" to the working hypotheses and initial conclusions gained from the analysis of livelihood baseline, shock exposure and support and recovery information. To achieve this, it is important to strike a balance between focus on the most vulnerable areas / persons and getting an overview of the entire population affected by the crisis. If there is only one day available for a field visit, these objectives will need to be achieved entirely by direct

observation and interviews with key informants at area (district / region) level. With more time, there will be further opportunities to meet the objectives through selection of sites, groups and individuals for interview.

Irrespective of the nature of fieldwork, the key questions driving the enquiry are the same as the questions driving the initial secondary information collection process (see section 2).

- How were people making a living before the disaster? (baseline)[1]
- What effect has the disaster had on their livelihoods?
- What coping mechanisms and livelihood strategies are different people/ households likely to develop and how effective / damaging are these?
- What are the opportunities and capacities for livelihood recovery within the local economy?
- What types of activities are needed for livelihood recovery of the different people/households?

These same questions will be investigated in greater depth by a subsequent DLA.

3.2 Interview with key informants at provincial / district heaquarters

At his level, the focus in the ILIA is on using the key informants to find out as much as possible about impact on livelihoods in the area and prospects for recovery.

Who:	Administrative head of district / province / region; government department specialists covering agriculture, livestock, fisheries, forestry, water, employment, infrastructure, small business development; NGO representatives; farmers and traders associations; food retail and wholesale representatives.
How:	Semi –structured interviewing using checklists and selected tools.
Timing:	Depending on circumstances between 1 and 2 hours.

1 Examples here would include forced migration and cessation of remittances from areas struck by the disaster.

CHECKLIST:

The following list of questions represents the maximum that could feasibly be expected in a post-disaster situation. In many cases it will not be possible to ask all questions and certain key informants will probably not be available. Thus, the questions should be seen as a general guide, to be tailored to individual circumstances.

Baseline

What are the main ways in which people make a living in this area? Probe for differences using relevant categories e.g.: farming, trading, fishing, natural resource exploitation, wage earners, remittances, migrant labour.

Impact of disaster on local livelihoods - overview

- What has been the general impact of the disaster on different aspects of the local economy?
    - How many or what proportion of shops or businesses have closed or collapsed?
    - How many or to what extent farms or crops have been flooded or otherwise damaged?
    - What is the damage to fisheries? How have fishermen and their families been affected?
    - Have livestock been killed by the disaster?
    - Has the disaster damaged roads used to carry local produce to the market?
    - Are communal marketplaces, slaughterhouses, silos or other common facilities damaged or collapsed?
    - Are local transportation services working?
- In the light of this, which groups of people have been most affected? Where are they? Why have they been most affected? Are the most affected groups the poorest groups?

Coping Strategies

- What are people likely to do to cope and what are they doing already? In particular:
    - How many people have left the area? How many are likely to do so soon?
    - What is the likelihood of people over-exploiting some natural resource in order to survive? (e.g. cutting down trees to get wood) and why? Is there any evidence of this happening already?
    - Is it likely that people will liquidate their assets (livestock, jewellery, other assets) in order to cope? – which will be liquidated first? is there any evidence that this is already happening?
    - Is it likely that people may have to reduce food intake now or in the future as a result of the event(s) what are the precise reasons, is this happening already?

Livelihood protection and recovery responses

- What are the initial priorities to preserve and support peoples' means of living (livelihoods?)
- What can be expected from governmental and non-governmental agencies operating in the area?
- What is the feasibility of using labour based methods for initial work (rubble removal, road repair, house construction etc.)? Can labour materials and services for these tasks be sourced locally? What is the availability of unskilled and skilled workers? Should payment be in cash or in kind or both, why? (see next checklist for more detailed questions on this topic).
- What changes are required for longer term recovery of affected populations and reducing vulnerability to similar events in future? How do we "build back better"? (include possible policy changes in your probing here).

3.3 Interview with traders

Objectives:	Market availability and market prices of: (i) essential food and non-food items for consumption; (ii) key inputs for production (e.g. seeds); and (iii) key inputs for small businesses. Key factors constraining / likely to constrain availability in the coming weeks and months.
Who to interview:	As many traders as possible in time available. Try to get a spread of commodities and trader types: shop owners, market traders in local markets; wholesalers, men and women as appropriate.
How to interview:	Depending on circumstances (time available, access to affected areas, size of assessment teams), it may be necessary to gather traders into focus groups. In other situations, it may be possible to interview traders separately.
Target time:	20 minutes per interview.

Key information to be collected

As much of the following information as possible should be obtained from the traders interviewed. In all cases the idea is to focus on the commodities that poor people in the area use for both consumption (e.g. staple foods, basic household items like matches, kerosene, soap) and agricultural and small business production.

CHECKLIST:

STEP 1 - Listing of items/commodities: the first step is aimed at the relevant traders (for example, the consumption listing question would only be applied to traders selling food and non-food consumption items and so on).

- **Consumption:** List of food and non-food commodities that poor people normally buy.
- **Agricultural production:** List of agricultural inputs that poor people normally buy.
- **Small-business:** List of basic tools for small and micro-business (e.g. utensils, raw materials).

STEP 2 - For each of the trader types, ask the following:

- Normal prices (for this time of year, or just before the disaster) per unit of sale.
- Normal availability just before the disaster (freely available?, in short supply?).
- Current prices.
- Current availability (freely available?, in short supply?).
- Likely price trend.
- Likely availability trend.

The following list has been adapted from trader interviews after the Kashmir earthquake. Obviously the list of commodities will vary according to area.

Consumption:			Production:
Wheat flour	Rice (broken)	Ghee	Wheat seeds
Dhal – mung	Tea	Onions	Rice seed
Sugar	Salt	Red chillies	Lentil seeds
Soap (Lifebuoy)	Kerosene	Charcoal	Fertilizer
Washing powder (Surf)			

3.4 Community level interviews

Goals:	• Establish the most important livelihood activities in the community. • Assess overall impact of the disaster on livelihood activities of men and women. • Identify priority needs, responses, coping mechanisms of men and women.
Method:	• Introduce the entire team and the purpose of the assessment. • Keep informal and open discussions, taking notes of relevant comments. • Try and interview a group of women separately from the men.
Target time:	1 - 1.5 hours.

Baseline livelihood analysis

Main ways in which people in the community normally make a living (i.e. before the disaster).

Which were the 3 most important livelihood **activities** for the "average" household in the community? (e.g. rice farming, trading, agro-processing, transport, remittances, labour out-of-the-area...).

Which were the 3 most important livelihood **activities** for the "poorer" household in the community? (e.g. rice farming, trading, agro-processing, transport, remittances, labour out-of-the-area...).

Were there any livelihood activities which only men did and only women did?

Taking the "average" household in the community, what would be their main **assets** before the disaster:

- Natural (access to farmland, water, forest);
- Social (belonging to organizations, support from extended family);
- Physical (type of house, vehicles, equipment, livestock, seeds);
- Human (labour power in the household, knowledge, education, skills within the household); and
- Financial (savings, numbers of livestock, income sources, credit).

For each asset, who has control? Men, women, or both?

Effects of the disaster

Examine whether the disaster has or will change the options for livelihood. Focusing again on the "average" household, identify actual and likely impacts on different assets.

Assets affected and not-affected by the disaster

- Natural (access to farmland, water, forest);
- Social (belonging to organizations, support from extended family);
- Physical (type of house, vehicles, equipment, livestock, seeds);

- Human (labour power in the household, knowledge, education, skills within the household); and
- Financial (savings, numbers of livestock, income sources, credit).

Has or will the disaster affect the pre-existing control of the assets (i.e. between men and women in the family)?

Is it the same for the 'poorer' households? If not, what are the main differences in terms of impact?

Discuss **coping mechanisms** after the disaster (how are people coping with these impacts on their assets and how are they likely to cope)? What new / adapted activities are they undertaking (and will they undertake) to cope? Are there different coping mechanisms for men and women?

Needs and responses

What are the short term (next 3 – 6 months) priority actions to protect livelihood capacity? Are there differences between the livelihood support needs of women and of men?

Has any agency given / promised support (government, UN agencies, NGOs, private sector, unknown).

What do the informants suggest to do to be better prepared for future disasters?, and what concrete, practical things should be done to reduce vulnerability of households, and men and women, in similar events in future? (e.g. new livelihood diversification / alternatives such as poultry, horticulture, small-scale enterprises, agro-processing; land conservation; employment elsewhere).

3.5 Household level interviews

Who:	The minimal scenario would be one group of households in one village. If there is time, then more communities can be visited and / or individual household interviews can be undertaken. If household level interviews are possible the priority would be to focus on poorer and more vulnerable groups in the community.
How:	Semi-structured interviewing using checklists.
Target time:	Depends on circumstances, as a rule of thumb no longer than one hour per interview.

HOUSEHOLD LEVEL LIVELIHOOD IMPACT CHECKLIST

NOTE: THE EMPHASIS PLACED ON DIFFERENT PARTS OF THIS CHECKLIST SHOULD BE INFORMED BY WHAT WAS FOUND AT COMMUNITY AND OTHER LEVELS. NOT ALL OF THE CHECKLIST MAY BE RELEVANT, SO IT SHOULD BE ADAPTED TO CIRCUMSTANCES.

1. Farming

(a) Crops

- Crops grown?
- Amount planted (area and quantity of seed / planting material).
- Type of seed (and fertiliser if applicable).
- Size of harvest this year (if harvested before disaster).
- Impact of disaster on harvested produce? (Stocks, access to market, price changes).
- Expected impact on harvest of different crops (if disaster comes before harvest) and reasons why.
- Land tenure status (ownership, rental, share arrangements, etc.).

(b) Livestock

- Did you own livestock before the disaster? Which type, how many, and what was each type used for (e.g. draught power, milk, meat, sales).

- Did you sell any livestock as a regular source of income before the disaster? Which ones? How many per year? What price on average? Where did you sell them/ who did you sell them to?
- How were the animals fed?
- Have your livestock holdings been affected by the disaster? Did you lose any animals? Is the shed / stall still standing? Do you still have access to fodder?

2. Fishing

- Fish harvested (types).
- Equipment used.
- Catch: amount and types of fish throughout the year.
- Impact of disaster on equipment; fish stocks; access to market; prices; expected incomes.

3. Casual labour

- What sort of casual labour work is carried out by each household member?
- Where do they do this work (do they migrate), who employs them?
- Which months of the year was the work available, and how much are they paid?
- Has this work been affected by the disaster, if so how?
- Will this work be affected by the disaster, if so how?

4 Formal employment

- Are any household members formally employed, if so what job are they doing?
- Where do they working, do they go and come back every day, or migrate?
- Has this work been affected by the disaster, if so how?
- Will this work be affected by the disaster, if so how?

5. Informal sector and self-employment (commerce and industry)

- What sort of commercial or industrial activity was owned or practised by household members before the disaster? How was this affected by the disaster?
- Has this work / source of income been affected by the disaster, if so how?
- Will this work / source of income be affected by the disaster, if so how?
- What would be needed to restore this source of income?

6. Remittances

- Are there any relatives or family members who live elsewhere (including overseas) and send back money?
- Where is that person working, and what are they doing?
- Has this work been affected by the disaster, if so how?
- Will this work be affected by the disaster, if so how?

7. Other

- Pensions (share family member's pension from formal employment)
- Government social welfare payment.
- Has this work / source of income been affected by the disaster, if so how?
- Will this work / source of income be affected by the disaster, if so how?

Section 4: Outputs and Uses of the ILIA

The ILIA should produce a short and to the point report, of between 5 and 10 pages. Normally, this should be available not later than 10 days after the disaster, and used immediately.

The key uses / outputs of the ILIA are:

- To support preparation of immediate livelihood protection project profiles for a Flash Appeal. These profiles should consider action that can start immediately and can contribute to livelihood protection and recovery over a period of 3 – 6 months.
- A skeleton for a livelihood recovery strategy. This can be fleshed out by a subsequent more in-depth Livelihood Assessment .
- To raise awareness of the livelihood impact of the disaster amongst donors, national and local government and the general public and what needs to be done about this (advocacy material).
- To act as a starting point for a subsequent DLA.

One useful way of organizing the information gathered in ILIA is to develop a **livelihood impact and response matrix** (see overleaf). The left hand side of the matrix can serve as the main part of the table of contents for an ILIA report. Information on the right hand side can be transferred easily across to a standard Flash Appeal response plan and project profiles.

Livelihood Impact and Response Matrix

Element	ILIA reference*
Magnitude and exposure	
Type of shock.	• Section 2.2 - Initial exposure and severity Information • Section 3.2 - Interview with key informants at provincial/ district headquarters • Section 3.4 - Community level interviews • Section 3.5 - Household level interviews
Geographical area affected (district/ provinces and general agro-ecological characteristics).	
Population numbers in affected areas.	
Type of damage.	
Livelihood characteristics	
Basic means of making a living before the shock (fishing, farming, casual or steady wage earning, self employed (in commerce, small industry, transportation, etc.), remittances etc. – with rough proportions if possible). Pre-disaster prices of basic goods (especially food) and inputs.	• Section 2.1 - Livelihood baseline data collection • Section 3.1 - Structure of field visits • Section 3.2 - Interview with key informants at provincial/ district headquarters • Section 3.4 - Community level interviews • Section 3.5 - Household level interviews
Livelihood Impact information	
Actual and likely impact on households and people.	• Analysis of information in Section 2.1 combined with that in section 2.2 • Section 3.2 - Interview with key informants at provincial/ district headquarters • Section 3.3 - Interview with traders • Section 3.4 - Community level interviews • Section 3.5 - Household level interviews
Likely coping strategies.	• Section 3.2 - Interview with key informants at provincial/ district headquarters • Section 3.4 - Community level interviews • Section 3.5 - Household level interviews

cont./

Recovery opportunities and needs	
Probable role and effectiveness of markets, existing government and other programmes, local institutions. Appropriateness of labour intensive works for initial livelihood support.	• Section 2.3 - Mapping agency capacity for relief and recovery • Section 3.2 - Interview with key informants at provincial/ district headquarters • Section 3.3 - Interview with traders • Section 3.4 - Community level interviews • Section 3.5 - Household level interviews
High priority livelihood recovery interventions for affected population groups.	• Analysis of information in Section 2.1 combined with that in sections 2.2 and 2.3 • Section 3.2 - Interview with key informants at provincial/ district headquarters • Section 3.4 - Community level interviews • Section 3.5 - Household level interviews

** Section numbers refer to the section headings in Volume 3 - Initial Livelihood Impact Appraisal.*

ANNEXES

1. Example Response Plan for a Flash Appeal
2. Tips for Rapid Calculations of Impact of Disaster on Employment
3. Typical Effects of Different Types of Natural Disasters
4. Template and Content of a 10 Page Flash Appeal

Annex 1: Example Response Plan for a Flash Appeal

Project Title: Initial Livelihood Recovery Plan

Project background and justification

The latest demographic survey for Bongwe district (2004) estimates total population at 48 000 (49 percent male, 50 percent under 15 years old, 10 percent above 60 years old). HIV/AIDS prevalence is 10 percent of the adult population. District capital (Bongwe town) population is 5 000. Average land size holding is 2.1 hectares. Staple food is maize. Key livelihood systems in the district include smallholder farmers (roughly 40 percent of the population), agro-pastoralism in the highlands (20 percent) and agro-fishers on the coast (30 percent). Petty trade undertaken buy all three groups through small retail outlets in villages and trading centres.

Typhoon Billy affected 30 000 hectares of arable farmland and 22 rural trading centres containing about 100 small businesses. The timing of the typhoon is such that there is insufficient time for replanting before the harvest. First estimates are that maize yields will be 90 percent down on last year. Livestock fatalities are light. Fishing has been seriously disrupted in some parts of the coast, with destruction of boats and fishing gear. One major trading and transport route into the north eastern part of the district is impassable due to a collapsed bridge. There has been widespread damage to property in the northern and eastern parts of the district where the Typhoon winds were strongest. There are a growing number of internally displaced persons (IDPs).

Most seriously affected will be the smallholder farming families (about 22 000 people). Least affected will be the agro-pastoralists in the highlands (about 8 000 people) as livestock not seriously affected and they are not so dependent on crop production for livelihood. The impact on agro-fishers is mixed, some will need initial assistance whilst others will still be able to carry on fishing. The trading centres and farming families in the north eastern parts of the district will be particularly vulnerable to livelihood failure due to the high rates of property damage and the collapse of the bridge connecting the district to markets in neighbouring districts.

Requirements and Objectives

In order to rehabilitate the basis of livelihood amongst affected communities a twin-track approach is required. The first track consists of initial injection of food, income and employment opportunities followed by more sustainable support to pre-existent livelihoods.

The objectives are:

1. To give an initial 'kick-start' to local economies in Bongwe district via employment intensive income generating activities (partly done through food for work).
2. To restore and strengthen agricultural and fishery based livelihoods through provision of productive inputs and strengthening of community-based marketing and mutual support structures.
3. To develop more sustainable small scale economic activities through training and provision of start-up grants.

Activities

The project consists of an integrated set of activities as follows:

a) Immediate (0 – 2 months)

- Food -for-work for clearance of debris
- employment intensive infrastructure rehabilitation for reconstruction.

b) Subsequent (2 months – 8 months)

- rural economic empowerment training for skills development and the provision of grants
- entrepreneurial training to promote other self-employment
- provide maize and vegetable seed through direct distribution and seed fairs using a voucher system.
- support affected coastal fishing families through provision of fishing equipment and processing equipment

- support social safety net systems at community level though training in marketing and investment.

Expected impact

As basic needs are met, affected populations turn to rebuilding their lives. Women and men from farming and fishing communities will have access to daily subsistence cash income. This in turn will stimulate the re-emergence of the private sector in the District and give people choices. When the next planting season comes, farmers will be equipped with sufficient inputs to meet basic food needs and cash requirements, thus reducing dependence on emergency relief after about 5 months when the main maize crop is harvested. Affected fishing communities will also be able to start fishing again, thus reducing their dependence on transfers. Entrepreneurial training will enable communities to diversify their livelihood base and support to community safety net and marketing systems will increase community resilience to future shocks.

Indicators

a) Process indicators

- Number of persons working under the food for work programme
- Number of persons working under labour intensive community infrastructure projects
- Number of farm families receiving seed and fertiliser
- Number of fishing families receiving equipment

b) Outcome indicators

- Disposable income levels
- Level of economic activity in Bongwe after three months
- Food and cash crop production
- Fish production and marketing

Project Summaries		
ILO and WFP	Project Title: Livelihood rehabilitation through employment. Objective: To contribute to livelihood restoration and strengthening of vulnerable groups through gainful employment and other income generating activities in the initial and longer-term. Beneficiaries: 10 000 adult men and women. Partners: Oxfam, Bongwe local government authorities, community-based organizations (CBOs), Bongwe Chamber of Commerce .	USD 2 000 000
FAO	Project Title: Livelihood rehabilitation through provision of productive assets. Objective: To restore and strengthen the food security and livelihoods of small holder farmers and fishing families through the provision of food for work relevant productive inputs (seed, fertiliser, fishing gear), technical support and support to community safety net and marketing systems. Beneficiaries: 10 000 typhoon affected smallholder farming families and 5 000 typhoon affected fishing families. Partners: Department of Agriculture, Bureau of fisheries, Action Aid, CBOs, local NGOs.	USD 3 000 000

Annex 2: Tips for Rapid Calculations of Impact of Disaster on Employment

The impact of disasters on employment comprises **employment losses** (number of people whose jobs and income were lost) and **additional demand for jobs** (number of people who resort to the labour market to make up for severe livelihood and income losses).

Due to important differences in data sources and estimation methodology, impact on employment is usually analysed separately for the agricultural and non-agricultural sectors.

Farming sector: A high proportion of farms are generally affected by disasters. However, the degree of damage varies enormously.

The estimation proceeds per stages:

1. Estimate the percent of total damage to crops, plus a percentage of partial damage, as a proxy for the proportion of farms losing most of their crops.
2. Multiply the above result by the percentage of farms providing the main source of income to the respective households.
3. Use the above result as a proxy for the number of farmer households turning their labour force to the labour market.

Farm wage labourers are assumed to be affected in the same proportion as farmers.

Fisheries wage workers: Whenever households depend also on fisheries, boat owners are assumed to be affected as a function of the estimated number of boats lost, based on reports from local authorities.

Seasonal farm workers (casual labour) are estimated as a function of the ruined crop area at a rate of the number of person-days per hectare per each different crop (values are provided by agricultural specialists).

Non-farm sector: In the non-farm sector the estimation is done based on affected establishments and average number of people employed per category of establishment (micro to large). It is assumed that physical damage to establishments is approximated by the physical damage to houses, on the basis of field reports and observations.

Besides direct physical damage to premises and equipment, industrial establishments are also generally affected by loss of electricity. Loss of power supply may cause a stop in the production for varying lengths of time. Estimates of the length of time during which the factories are stopped leads to estimates of the number of workdays lost.

Commercial establishments may also be stopped for varying lengths of time, from one day at least to more than one month in the case of destroyed establishments that cannot restore their premises or inventory. Likewise, the number of jobs affected (workdays lost) is estimated on the basis of the average number of employees per establishment, and an estimated average length of closure.

It can be estimated that the self-employed have their livelihoods damaged or destroyed at the same rate of all damaged or destroyed houses in the affected area. It is further assumed that a percentage (usually ranging 15 percent to 25 percent) of the affected self-employed (those whose houses were totally damaged) may have lost their tools or inventory in the disaster, thus keeping them from restoring their income generating activity in the aftermath of the disaster. The impact is estimated in an average number of days based on field evidence.

Annex 3: Typical Effects of Different Types of Natural Disaster[1]

Cyclone / typhoon / hurricane

General effects:

- Some damage and many injuries; wind damage to all vegetation, electricity distribution systems and some buildings.

Possible secondary disasters:

- Storm surge causing deaths and injuries, and damage to vegetation and all infrastructure along the coastal belt. Heavy rain and flooding further inland.
- Mud slides.

Likely impact on livelihoods:

- Serious losses of household crops and livestock.
- Loss of productive assets of households.
- Loss of employment in damaged businesses.
- Loss of employment as casual labour on farms.
- Loss of trade opportunities due to damaged market infrastructure (affects both supply and demand).
- Increase in social transfer needs in the context of decreased ability to meet needs.
- Number of IDPs potentially very large.
- Possible temporary work opportunities in clearing debris and reconstruction.

1 Source: Emergency Food Security Assessment Handbook – WFP (2005).

Seasonal floods

General effects:

- Small number of deaths; damage to vegetation and infrastructure depending on the rate of flow and duration of flooding; erosion (harmful) and / or sedimentation (potentially beneficial – enhancing fertility).

Possible secondary disasters:

- Epidemics of communicable disease.

Likely impact on livelihoods:

- Depending on time of year, rate of flow and depth and duration of flooding, loss of household crops.
- Loss of employment in damaged businesses.
- Loss of trade opportunities due to damaged market infrastructure (affects both supply and demand).
- Increased need for social transfers.

Flash flood or tsunami

General effects:

- Many deaths and injuries of people and animals.
- Severe damage to infrastructure, buildings, agricultural land in the valleys / coastal areas affected.

Possible secondary disasters:

- Landslides.
- Epidemics of communicable diseases.

Likely impact on livelihoods:

- Serious losses of household crops and livestock in affected areas (maybe localised in the case of flash floods).
- Loss of productive assets of households.
- Loss of employment in damaged businesses.
- Loss of employment as casual labour on farms.
- Loss of trade opportunities due to damaged market infrastructure (affects both supply and demand).
- Increase in social transfer needs in the context of decreased ability to meet needs.
- Numbers of IDPs potentially very large.
- Possible temporary work opportunities in clearing debris and reconstruction.

Earthquake

General effects:

- Many deaths and injuries due to collapsing buildings.
- Damage to roads, bridges, dams, water and electricity distribution systems, especially near the epicentre.

Possible secondary disasters:

- Further damage due to after-shocks.
- Fires in urban areas.
- Flooding (if dams are broken or river channels blocked).
- Temporary displacement of large numbers of households.

Likely impact on livelihoods:

- Rainfed crops may or may not be affected significantly. Damage to irrigation systems can have a significant impact.
- Livestock casualties could be high if livestock are housed in stone structures / in the same houses as people.
- Loss of productive assets of households.
- Loss of employment in damaged businesses.
- Loss of trade opportunities due to damaged market infrastructure (affects both supply and demand).
- Numbers of IDPs may or may not be large.
- Possible temporary work opportunities in clearing debris and reconstruction.

Landslide

General effects:

- Death and injuries and almost total destruction of buildings, infrastructure and farm land in the direct path of the slide.
- Broader disruption to marketing systems if major roads are in the path of the slide.

Possible secondary disasters:

- Flooding if river channels are blocked.

Likely impact on livelihoods:

- Crop and livestock losses will be localised.
- Market disruption likely to be less than for other natural disasters.
- Change in local topography and land use possibilities.
- Small scale displacement of families.
- Social transfers will be required.

Volcanic eruption

General effects:

- Death and injuries from lava flows and ash and gas releases.
- Destruction of infrastructure from lava flows and ash falls.

Possible secondary disasters:

- Fires.
- Landslides.
- Flooding, if river channels are blocked.

Likely impact on livelihoods:

- Localized crop destruction.
- Permanent loss of productive land due to lava flow and pollution of soil.
- Employment losses due to damage and destruction of businesses.
- Temporary work in re-building.

Annex 4: Template and Content of a 10 Page Flash Appeal

1. Executive summary (1 page)

Brief summary of:

- The crisis.
- Priority needs and humanitarian response plan.
- Amount of money needed in USD.
- Time span covered by this appeal (cannot be longer than 6 months).

2. Content and humanitarian consequences (1.5 pages)

2.1 Context

- What happened?
- Where?
- What has happened since the onset of the crisis? (e.g. information gathered, government agrees to international assistance, initial response by agencies, assessments done, etc.)
- If major uncertainty exists about the evolution of the crisis, what are the best, worst, and most likely scenarios?

2.2 Humanitarian consequences

- Who is most affected and why? (Provide estimates, if possible, of specific groups most affected, disaggregated by sex and age).
- What are the needs (of specific groups, disaggregated by sex and age) as a direct and initial result of this crisis?
- What would be the needs in the best, worst, and most likely scenarios (if major uncertainty exists)?
- What are the priority sectors for response? (Choose only from the Inter-

Agency Standing Committee standard sectors: shelter and non-food items; health [including nutrition and psycho-social programmes]; water and sanitation; food; agriculture; protection-human rights-rule of law; multi-sector; education; mine action; coordination and support services; and economic recovery & infrastructure).

3. Response plans (1 page)

For each sector that the Country Team decides to include:

- Objectives (no more than 2, each of which is specific and measurable).
- What is the strategy for achieving the objectives.
- Humanitarian actions that can be implemented within the time span of this flash appeal (maximum 6 months).
- Expected outputs and impacts.
- Project tables as per model below (please do one table for each project and leave a space between each complete table).

NOTE: In a Flash Appeal there is no need for the Consolidated Appeal Process-style one-page project sheet. A summary box per project like the one below is sufficient.

Project Summary		
FAO	Project Title: Livelihood rehabilitation through provision of productive assets. Objective: To restore and strengthen the food security and livelihoods of small holder farmers and fishing families through the provision of relevant productive inputs (seed, fertiliser, fishing gear), technical support and support to community safety net and marketing systems. Beneficiaries: 10 000 typhoon affected smallholder farming families and 5 000 typhoon affected fishing families. Partners: Department of Agriculture, Bureau of fisheries, Action Aid, CBOs, local NGOs.	USD 3m

4. Roles and responsibilities (0.5 page)

- Maximum 10 lines on how the response is being coordinated and who is responsible within the government and the UN.
- Table indicating cluster/sector leads and the major humanitarian stakeholders (e.g. government, UN, Red Cross/Crescent of the country of operation, NGOs) that are responding to the crisis in affected regions, by sector.

Detailed Livelihood Assessment

VOLUME 4

The Livelihood Assessment Tool-kit

Analysing and responding to the impact of disasters on the livelihoods of people

Volume 4: Detailed Livelihood Assessment

[First Edition]

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Section 1: Introduction

1.1 Objectives and scope of the DLA

What is the Detailed Livelihood Assessment for?

The main objective of the Detailed Livelihood Assessment (DLA) is to provide a thorough assessment of the impact of disaster on livelihoods and identify opportunities and capacities for recovery at household, community, and local economy levels. In this way it is intended to serve as a platform for local and central government authorities, in partnership with the international community to take informed decisions and focus assistance by providing a sound basis on which livelihood recovery response plans and projects can be elaborated. The timeframe of the DLA calls for results to be ready within three months after the onset of a disaster.

One of the most important aims of the DLA is that it provides information of sufficient quantity and quality to allow credible livelihood-related project proposals to be written. This is in recognition of the fact that in a post-disaster context, *revised flash appeals* and *early-recovery donor conferences* may take place as soon as 6 to 8 weeks after a disaster. In such cases, there will not be sufficient time to conduct in-depth project related sectoral studies to feed into these events.

Some of the key questions the DLA will help to answer are the following:

- How were people (male and female) making a living before the disaster?
- What effect has the disaster had on their livelihoods?
- What coping mechanisms and livelihood strategies have different people/ households developed and how effective / damaging are these?
- What are the opportunities and capacities for livelihood recovery within the local economy?
- What types of activities are needed for livelihood recovery of the different people / households / communities?

The DLA and the Livelihood Baseline

Ideally, the DLA should be used in conjunction with a pre-prepared livelihood baseline (LB). The latter should provide important contextualization and quantification of the pre-disaster situation and allow a better analysis of the changes provoked by the disaster. Detailed guidance on how to construct a livelihood baseline focused on "disaster hotspot" parts of a country are contained in Volume 1 of the Livelihood Assessment Tool-kit (LAT).

In practice, baselines may not exist, or if they do, they may be fragmented and partial. In such cases, the DLA itself should **include the collection of appropriate and sufficient baseline information.**

The need for coordination with other assessment exercises

Immediately after a natural disaster, information will normally be collected and made available by the Office for the Coordination of Humanitarian Affairs (OCHA) and the United Nations Disaster Assessment and Coordination (UNDAC) team. After this, further more in-depth assessments will be conducted by a number of agencies and there will be a potential for overlap and assessment fatigue on the part of affected households. In order to minimise this, it is critical that the DLA is coordinated with other processes, through the United Nations (UN) Humanitarian / Resident Coordinator. In this regard, one particularly important process is the Post-Disaster Needs Assessment (PDNA). This is currently under development and it is foreseen that livelihood assessment will play an important role in the overall PDNA framework.

Whom are these guidelines aimed at?

The DLA guidelines are aimed at experienced assessment team leaders. Such people will be able to use and adapt the guidelines with minimal additional training, referring to other volumes in the LAT as appropriate. They will be aware of the need to balance time and human resource constraints and challenges against the need to produce quickly a high quality report which accurately captures the impact of a disaster on how people make a living. They will know how to lead teams in the field and will have a general knowledge of socio-economic assessment and analysis techniques, including standard Participatory Rapid Assessment (PRA) techniques. Ideally they should be familiar with the Sustainable Livelihoods Framework (SLF).

What is in this guideline?

This Detailed Livelihood Assessment Guideline is broken down into five sections as follows:

- Introduction and overview of the DLA process.
- Initial information collection, planning and training (Phase 1 of DLA).
- Conducting the DLA field work (Phase 2 of DLA).
- Analysis and presenting the information (Phase 3 of DLA).
- Key participatory tools.

1.2 Overview of DLA process

The will be time pressures when planning and implementing the DLA, and certain compromises will have to be made. In particular, there will be trade-offs between quality of the process and the need to get results out quickly, to meet deadlines imposed by the needs of the affected populations, governments and the international community. [1]

The timeline and to some degree the structure of the DLA will also depend on whether the assessment builds on a pre-existing assessment preparedness 'infrastructure' i.e. a series of measures that have taken place before the assessment starts. These will include:

- The existence of an up to date roster of international and local expertise, together with institutional procedures to ensure that persons can be mobilized and released from other duties at short notice (this should allow the DLA to start more quickly).
- The existence of a livelihood baseline for the area affected by disaster (this should reduce the time spent on Phase 1 of the DLA [see table] and help in focusing the assessment).
- An Initial Livelihood Impact Appraisal – see Volume 3 (this should also help focusing the DLA itself).

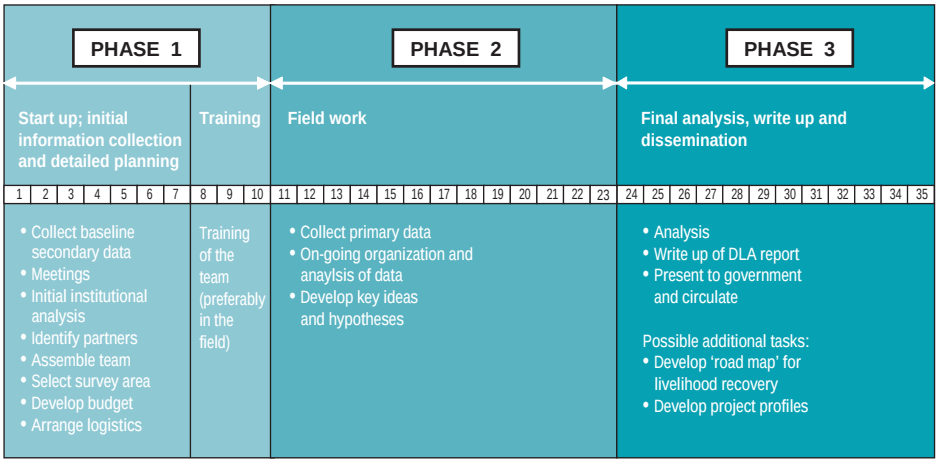
1 Including revised Flash Appeals and early recovery donor conferences.

- Pre-existing quick release budget for the DLA, and pre-allocation of logistical support (this would allow the DLA to be started more quickly and would also reduce time spent on Phase 1).
- Pre-selected and trained DLA team members (this would reduce the time spent on phase 3 and should improve the quality of the DLA output).

In practice of course, natural disasters can arise unexpectedly or infrequently. For example, not all disasters occur in 'hotspot' countries such as Indonesia or Bangladesh. Moreover, even in 'hotspot' countries, disaster may happen in unexpected areas. To cater for the fact that 'DLA preparedness' may not have been carried out, these guidelines will take into consideration a situation in which none of the preparatory or prior actions indicated above have been done.

Typically, a DLA will take around five weeks from start to finish. The immediate output will be a 30 page report directed at key decision-makers. In addition to the report it is helpful if there is a 'road map' for livelihood recovery including relevant project profiles. The following figure illustrates a timeline for the DLA.

Fig. 2: Indicative timeline for a DLA



As indicated in the figure, the implementation of a DLA includes three broad phases.

Phase 1 - Start up; initial information collection and detailed planning: The first phase of the DLA is characterized by an intensive period of information gathering using various formal and informal sources to gain an initial picture of the situation and context. This period will also involve a lot of meetings to sort out logistics and planning the fieldwork and training. This will involve selecting the sample area, assembling the team, deciding on the timeframe, consolidating the budget and working out logistics such as transport and lodgings etc. At the end of this period, *training of the DLA team for fieldwork* will take place

Phase 2 - Fieldwork: To be based around semi-structured interview techniques, and involving collation and analysis of information in the field so that a picture of the situation can gradually be built up.

Phase 3 - Write up presentation and dissemination: This final stage consists of the final analysis and write up of the actual assessment, presentation to government and dissemination. This may be followed by preparation of a 'road map' for livelihood recovery (e.g. a draft logical framework) and related project proposals.

Section 2: Phase 1 - Initial Information Collection and Detailed Planning

2.1 Initial information collection[1]

Why:	To gain a first understanding of the impact of the disaster on the livelihoods of people affected and prospects for recovery.
When:	From the start of the assessment exercise.
What:	Available information on (i) the underlying pre-disaster livelihoods of affected populations (baseline); (ii) magnitude of the disaster, areas and populations exposed to the disaster; and (iii) possible sources of livelihood recovery support for affected communities.
How:	Review of secondary data, interviews with key informants at national level.
Who:	DLA team leader with local support.

2.1.1 Necessary information

Three basic types of information are needed in this phase:

- Pre-disaster data (livelihood baseline data);
- Data on the magnitude and location of the event(s) and the populations exposed; and
- Possible sources of support for affected populations.

This can be compiled through a combination of secondary data collection and interviews with key informants. The depth of investigation that is necessary in the DLA to develop a picture of these three elements depends on what has gone before in related assessment processes. In particular, the DLA will benefit from a pre-existing LB (see Volume 2) and an ILIA (see Volume 3).

The rest of this section will proceed on the assumption that neither a LB nor an ILIA has been done.

1 Much of this section is taken from section 2 of Volume 3 - ILIA.

2.1.2 Livelihood Baseline data collection

Baseline data is normally collected through a combination of compilation of relevant secondary data and discussions with key informants. The key aspects of baseline data needed will include:

1. *General description* of the affected area (typically a region / province / district) pre-disaster. This will include an overall picture of issues such as topography, communication networks, population size, basic economic and social structure.
2. *Age and sex population breakdowns:* Description of the pre-disaster demographic characteristics of the populations in the affected areas.
3. *Pre-disaster livelihood profiling:* The key secondary data to be collected and analysed will be concerned with various aspects of pre-disaster livelihoods - particularly on agriculture and employment for rural areas and various aspects of employment for urban areas. It will include the following:
    - "normal" livelihood activities for the area and time of year (farming, fishing, wage labour etc.) "normal" livelihood activities for the area and time of year (farming, fishing, wage labour, self-employment, etc.) and numbers of people involved in these activities.
    - Within these categories, it is also important to understand the specific types of economic activity (e.g. types of food crops grown, types of commercial crops grown, livestock numbers, small business numbers and types, types of manufacturing plants).
    - For employment data, key parameters include: **(un)employment** figures disaggregated by sex and age group; **employment** figures disaggregated **by occupational category** disaggregated by age and sex **employment** figures disaggregated **by sector and measures of key occupational wages** and **salaries** disaggregated by sector and occupation[2].

Key sources of such types of baseline data include:

- Government census data and reports;
- Official statistics for the area (from the Central or local Statistical Office);

2 More details on these particular parameters can be found in Volume 2, section 7, tables 9(a) to 9(d).

- Statistical surveys from government ministries, universities, non-governmental organizations (NGOs), UN agencies or IFIs;
- Socio-economic, political and historical studies by research groups, government or university;
- National or regional disaster-preparedness plans;
- Existing geographic information systems in the area, if any;
- Relevant UN information (from the various relevant agencies, chiefly United Nations Development Programme, FAO, ILO, World Health Organization, United Nations Children's Fund and United Nations Educational, Scientific and Cultural Organization);
- Reliefweb web site: http://www.reliefweb.org; and
- Existing FEWSNET livelihoods maps of the country; http://www.fews.net.

More detailed information on livelihood baseline data including what to collect and how to present it can be found in Volume 2: Livelihood Baseline and Contingency Plan – in particular section 3.2.1 and the tables in section 7. The extent to which the guidance in Volume 2 can be followed will depend on time and resources available for the baseline part of the DLA.

2.1.3 Initial severity and exposure information

At the same time that baseline data is being collected, it will be important to gather information on the **magnitude and location of the event(s)** and the populations exposed. This intelligence may come from many of the same sources which provide baseline information. In this regard, the National Government Disaster Management Agency/Ministry, OCHA, UNOSAT, World Food Programme (WFP), Press, Radio and Television bulletins will be important. The key questions here are:

- What is the nature, extent and magnitude of the shock/crisis;
- What geographical areas have been affected?
- How have they been affected? (hectares of agric land destroyed, estimates of tonnes of production lost, numbers of cattle killed, value of these losses, factories destroyed, shops collapsed, areas of informal trade destroyed, etc.);

- Which groups of people have been affected (livelihood types) and numbers;
- What is the current information and knowledge on level of disruption to livelihood activities (including market disruptions)?; and
- How are people coping with the disaster?

NOTE: Initial hypotheses on impact can usefully be informed by the 'typical effects' of different kinds of disaster shown in Annex 4.

2.1.4 Tips for calculations of impact of disaster on employment using secondary data[3]

The impact of disasters on employment is comprised of *employment losses* (number of people whose jobs and income were lost) and *additional demand for jobs* (number of people who resort to the labour market as a coping strategy to make up for livelihood and income losses).

a) *Employment losses*. Loss of jobs can be estimated in a more or less straightforward way, based on the number of closed businesses, lost fishing boats and other similar damage caused by the disaster. The initial estimation should be based on Government's early assessments of the disaster impact. This can be verified and changed as necessary after DLA fieldwork and analysis.

Employment losses include:

- Wage workers dismissed or suspended without remuneration
- Self-employed workers or entrepreneurs, or their family help, who cannot work because they have lost their capital (infrastructure, equipment, or working capital – such as raw materials or intermediate and finished products) or cannot use it due to destroyed roads, lack of electricity in the area, or other kinds of disaster damage.

3 Some of the following information gathering and analysis will normally be possible within the first week of the DLA. Other aspects including analysis of impact on the local economy (see pg. 130-131) may take considerably longer. For this reason, it makes sense for one person from the DLA team to focus on this aspect throughout the assessment process, integrating the results with the DLA fieldwork findings in the analysis stage.

b) *Additional demand for jobs*. Besides the loss of existing jobs, there is also another kind of impact on the labour market as more people may be seeking casual jobs due to damage to their livelihoods without loss of their usual employment. This additional supply of labour includes people already in the labour force (e.g. small farmers who lost their harvest, or fisherfolk who lost their boats) or people formerly outside the labour force (e.g. members of those farmers' or fisherfolk's families). Additional demand for jobs can only be estimated in an approximate way.

The initial estimate of overall impact on employment (i.e. *a* and *b* above) can be made through some "back of the envelope" calculations. These can subsequently be revised after fieldwork has taken place. The following paragraphs give tips on what to look for and how to do quick and rough calculations with can be refined as more information becomes available through DLA fieldwork and other sources.

Due to important differences in data sources and estimation methodology, impact on employment is usually analysed separately for the agricultural and non-agricultural sectors.

Farming sector: A high proportion of farms are generally affected by disasters. However, the degree of damage varies enormously.

The estimation proceeds as follows:

1. Estimate the percent of total damage to crops, plus a percentage of partial damage, as a proxy for the proportion of farms losing most of their crops.
2. Multiply the above result by the percentage of farms providing the main source of income to the respective households.
3. Use the above result as a proxy for the number of farmer households turning their labour force to the labour market.

Farm wage labourers are assumed to be affected in the same proportion as farmers.

Fisheries wage workers: Whenever households depend also on fisheries, boat owners are assumed to be affected as a function of the estimated number of boats lost, based on reports from local authorities.

Seasonal farm workers (casual labour) are estimated as a function of the ruined crop area at a rate of the number of person-days per hectare per each different crop (values are provided by agricultural specialists).

Non-farm sector: In the non-farm sector the estimation is done based on affected establishments and average number of people employed per category of establishment (micro to large). It is assumed that physical damage to establishments is approximated by the physical damage to houses, on the basis of field reports and observations.

Besides direct physical damage to premises and equipment, industrial establishments are also generally affected by loss of electricity. Loss of power supply may cause a stop in the production for varying lengths of time. Estimates of the length of time during which the factories are stopped leads to estimates of the number of workdays lost.

Commercial establishments may also be stopped for varying lengths of time, from one day at least to more than one month in the case of destroyed establishments that cannot restore their premises or inventory. Likewise, the number of jobs affected (workdays lost) is estimated on the basis of the average number of employees per establishment, and an estimated average length of closure.

It can be estimated that the self-employed have their livelihoods damaged or destroyed at the same rate of all damaged or destroyed houses in the affected area. It is further assumed that a percentage (usually ranging 15 percent to 25 percent) of the affected self-employed (those whose houses were totally damaged) may have lost their tools or inventory in the disaster, thus keeping them from restoring their income generating activity in the aftermath of the disaster. The impact is estimated in an average number of days based on field evidence.

It will also be important to collect available secondary information on the overall characteristics of the local economy of the affected areas, prior to the disaster, in both rural and urban areas, to determine how its dynamic has been affected and which are the potentials and the conditions for a quick recovery of the employment demand in the labour market. This will provide orientations for decision making on (a) constraints to the revitalization of economic activities;

(b) economic sectors where the intervention should be focused; (c) stakeholders to be involved; and (d) capacity building and training needs.

The following information should be collected and analysed:

- **Informal-economy** estimated figures, analysis by sex and age group by sector; and profile of the informal activities;
- **Private business equipment and facilities** in the territory (% households with commerce shops, % household with workshops, % households with fishing boats, % household using tractor, % household owning tractor, trucks, lorries or pickups, % households with other equipment);
- **Remittances and formal state transfers** (remittance amount, typical amounts, transfer mechanisms, pensions, unemployment benefits, insurance;
- Profile of the local **labour demand** by sector (agriculture, livestock, fishing, small businesses, construction, mining, trade). This analysis will specify how labour-demand has been affected and to what extent it changed due to population movements. It will also indicate the type of professional competences required by the enterprises;
- Profile of the local **labour supply** within the sectors of (agriculture, livestock, fishing, small businesses, infrastructure, mining) has changed due to displacement and other direct consequences of the crisis;
- **Market disruption**. This component of the assessment aims at providing a picture of the disruption suffered by the market flows of goods and services and their effects for future recovery.

Through answering these questions, a picture of the **two sided impact** of the disaster on the various kinds of livelihood and employment will start to emerge. The first side is **livelihood losses** (number of people whose jobs and income were lost); whereas the second side is **additional demand for livelihood sources** (number of people who resort to the labour market to make up for severe livelihood and income losses)[4].

4 For more details on how to undertake these data gathering and analysis tasks, please contact ILO through cruciani@ilo.org

2.1.5 Mapping agency capacity for relief and recovery

One other important element of initial data gathering concerns **actual and possible sources of support for affected populations**. This will help determine the magnitude and need for additional support through any UN appeal process, as well as potential partners. Whilst an understanding of livelihoods will include likely coping capacity, this is not the same thing as mapping the actual and possible capacity of non-UN agencies to support livelihood recovery. Clearly, it will not be possible to compile an inventory from disparate sources, thus progress in collecting this information will depend on how centralized and comprehensive it is. Notwithstanding this, key issues and possible sources of information are indicated in the following table:

Possible sources of information

Issue / institution	Possible sources
National disaster management infrastructure, plans and financial support.	President's / Prime Minister's Office / Disaster Management Authority or equivalent.
Local government offices. Location, staff, services provided.	Ministry of local government.
Local and International NGO presence in affected areas.	National NGO council or equivalent; head offices of individual agencies.
Significant area based development projects and programmes operating in affected areas.	Ministry of Finance / Development Planning; donor agencies.
Community organizations including cooperatives in affected districts, number and type.	Ministry of Social Welfare, International NGOs.
Wholesale and retail outlets for food and productive input supplies (seeds, tools, livestock); food and input market infrastructure.	Chambers of commerce, Ministry of Trade and Industry, Company head offices.

2.2 Planning for DLA fieldwork

What:	Choosing institutional partners, selecting local DLA team members, organising fieldwork logistics (transport, accommodation etc.), working out budgets.
How:	Various methods depending on circumstances.
Who:	Team leader in consultation with local contacts and senior team members.
Indicative timeframe:	3 - 7 days (to be conducted concurrently with initial information collection – see previous section 1.1).

In cases where assessment preparedness has been undertaken, partners will have been pre-selected, prospective DLA team members already trained and logistical agreements already made. On the contrary, when previous preparation has not been dealt with, all these issues will need to be sorted out on the ground. This has a time implication, possibly of a couple of days. **The following paragraphs therefore apply only to the latter situation**. All of the following will need to be conducted concurrently with initial information collection (see section 2.1).

2.2.1 Institutional partners and team members

In this period it is important to choose key partners: the organizations who have agreed to cooperate and provide human, logistical and possibly financial resources for the survey. Identification of individuals and training of the team can then take place.

With regard to the kind of partners to work with, relevant UN agencies have an important role to play. In particular, the UN Resident Coordinator, OCHA and United Nations Development Programme (UNDP), supported by FAO and ILO should prepare the ground with the relevant national institutions in order to ensure maximum government 'buy-in', and to have government staff on the assessment team. Government should be encouraged to provide both human and where possible financial resources. NGOs are another obvious choice for providing human resources, and many will have staff trained in PRA techniques.

International NGOs should be approached and encouraged to engage in joint efforts[5]; they may also have their own resources. National NGOs may have lower financial resources, but may have in-depth experience of local conditions and terrain. It will probably be worthwhile to approach other donors, both multilateral and bilateral, particularly those who have an affinity for livelihoods approaches, either for human or financial support. National consultants are another possible source of recruits for the team. Aim to have a team with a variety of skills that will complement each other, from a range of backgrounds and institutions to provide varied perspectives and viewpoints, and with due consideration to an appropriate gender balance.

2.2.2 Calculating survey costs

It is clearly impossible to give a definitive figure or range for the costs of a DLA, as so much will depend upon circumstances. The following budget is based on the actual costs of a DLA conducted after the Pakistan earthquake. The DLA team consisted of one international team leader and six locally recruited team members. The Assessment lasted a period of 3 weeks of field work undertaken by the international consultant and locally recruited members, plus one week to finalize the report.

An example of a DLA budget can be found on the following page.

5 International NGOs like IFRC, Save the Children, Oxfam, Mercy Corps, Care among others may be available in the field and willing to collaborate.

Example of a DLA budget

No.	Expense item	USD	Comment
1	International staff costs, salaries/fees, Daily Subsistence Allowance (DSA), airfare.	25 000	Internationally recruited LAS Team Leader costs.
2	National staff costs: (i) salary top-ups, fees, DSA; and (ii) additional staff (maybe consultants).	 5 000 5 000	Government staff salaries normally met by government, but may need some salary top-up for long hours; Out-of-station DSA for local staff; Possible hiring of additional staff for admin, translation, etc.
3	Vehicle hire, fuel, etc.	5 000	These costs could be reduced if UN agency or partner vehicles are used.
4	Tents and bedding.	1 000	Sleeping accommodation may be in short supply making purchase of tents and sleeping bags necessary.
4	Hotel costs for team on survey.	5 000	May be necessary.
5	Food and provisions.	1 000	General provisioning for field operations; lunches, meals, snacks, water, etc.
6	Office supplies, photocopying, etc.	2 000	Allow for large amount of photocopying of forms, checklists, responses, etc.
7	Miscellaneous.	5 000	
	TOTAL	54 000	

2.3 Area and settlement selection[6]

What:	Choosing geographical areas and settlements for survey.
How:	Zoning in conjunction with exposure information, purposeful sampling, random sampling as appropriate.
Who:	DLA team in consultation with local experts and contacts.

2.3.1 Choosing the areas for assessment

The area feasible for assessment by the DLA will be determined by a combination of the nature of the disaster and human, financial and logistical resources available for the exercise. In all cases, the aim is the same: to gain a holistic picture of the extent of the damage done to people's livelihoods, and the capacities and opportunities for recovery and increased resilience, at the household, community and local area levels, in both rural and / or urban contexts as appropriate.

All other things being equal, the degree to which a holistic picture of impact can be obtained will obviously be different in the case of a disaster with a large and diffuse impact (e.g. a tsunami) than one with a more geographically focused impact (e.g. a land slide). In the latter case, it will be easier to be more comprehensive and therefore representative. Where there is large and diffuse impact it will be more challenging to achieve representativeness, and it may be necessary to complete the findings of the DLA with extrapolations derived from a livelihood baseline. It should be noted that even with relatively geographically contained disasters, the livelihood impacts may spread well outside the actual disaster site due to market disruptions and forced migration. The DLA should also attempt to capture these broader dynamics.

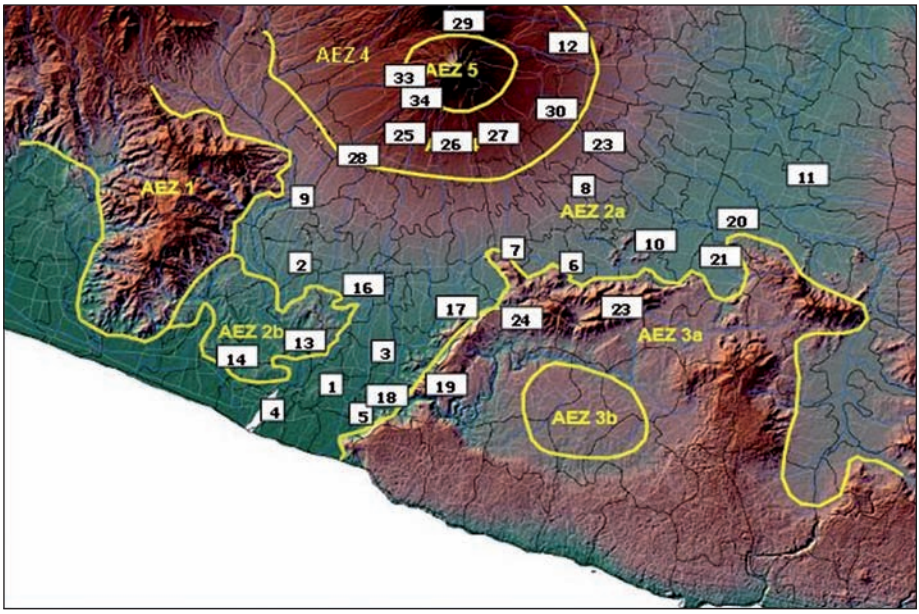
Zoning: In most rural areas, a useful starting point for sampling is to divide up affected areas into livelihood 'zones', within which people share broad common livelihood-sustaining activities and goals. In settled rural areas it is often straightforward to derive livelihood zones as these are often closely related to agro-ecological zones which have already been delineated by Ministries of Agriculture in collaboration with development partners. Note that Agro-ecological Zones (AEZs) are not the same thing as livelihood zones, as the former do not capture the full range of factors that influence livelihood patterns (so for example it is possible to have more than one broad livelihood

6 Household selection is covered under Phase 2 of the DLA (see pg. 156-157).

group within an AEZ, in separate or overlapping geographical areas). More fundamentally, any kind of livelihood zoning in peri-urban or urban areas, is likely to be much more challenging and may not be possible.

Bearing in mind these caveats, Figure 3 shows how AEZs were used to help decide sampling for a livelihood assessment conducted in Yogyakarta, Indonesia. In the Figure, the numbered boxes represent the communities where the DLA undertook sample interviews.

Figure 3: Yogyakarta and Central Java AEZ map



AEZ 1: Upland forest
AEZ 2a: Lowland irrigated
AEZ 2b: Lowland semi-irrigated
AEZ 3: Dryland agriculture
AEZ 3a: Dryland agriculture, partially irrigated
AEZ 4: Upland mixed farming (lower slopes of Mt Merapi)
AEZ 5: Forest highland (upper slopes of Mt Merapi)

A number of different sources were used to identify AEZs:

- AEZ map from the Agriculture Technology Research Institute (Balai Pengkajian Teknologi Pertanian - BPTP);

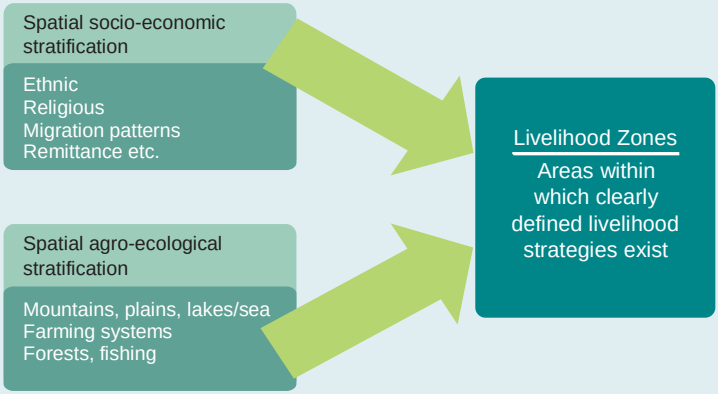
- Poverty map (UN); and
- Relief, topography, altitude maps.

If neither up-to-date livelihood zones nor AEZ zoning has taken place, a rapid zoning can be undertaken. Details on how to do this are found in the following box.

Rapid Livelihood Zoning: A tool for DLA planning – particularly in rural areas

If there are no pre-identified AEZs or LHZs within which to work, it is possible to develop these in a rapid and participatory way, using secondary data and key informants. It will be important to assemble as much relevant data as possible, including available maps and studies covering the area affected by the emergency event, and initiate a discussion around different livelihood patterns in different parts of the affected area(s). One useful way to get discussion going is to focus on issues such as:

- Altitude and topography
- Population density
- Social and ethnic groups
- Main sources of food and income – livelihood activities (this may include types of employment; crops grown – main cash crops, food crops, livestock types).



Through this process, spatial livelihood pattern distinctions will become clear. Experience in Malawi and Zambia has demonstrated that if carried out with knowledgeable informants and with very basic – or no maps, rough but adequate livelihood zoning can be prepared in a matter of a couple of hours. The process of developing the zones results in the generation of a lot of useful information, which can help contextualize the affected area(s) and can be used later on for the purposes of triangulation.

IDPs: As an addition to this kind of exercise, it is important to consider the post-disaster dispersion of Internally Displaced Persons (IDPs). If the DLA is taking place a month or two after the disaster, it is possible that IDP camps have already been set up and these will have their own evolving livelihood patterns and may consist of people who have migrated from different livelihood zones. They should be treated as distinct areas within a broad geographical zoning.

Exposure to natural disaster: As noted above, in some cases it will not be practicable to develop livelihood zones. This may be the case if the disaster strikes peri-urban and urban areas. In these cases, the primary stratification criterion may be severity of impact, as indicated by extent of damage to communal and personal physical assets such roads, buildings, electricity, water and telecommunications. In this way, it may be possible to divide areas into (for example) 'high exposure', 'moderate exposure' and 'slight exposure', clearly stating the criteria for classification. In any case, even in rural areas where livelihood zoning is possible, sampling of population settlements should also be influenced by degree of exposure to the hazard (see next sub-section).

2.3.2 Selecting Settlements

Depending on where the disaster has struck, the DLA may have to cover urban, peri-urban or rural areas or some combination of the three. This fact has implications for sampling methods.

In general terms, once a zoning scheme has been worked out the next step is to choose representative settlements within each zone. This consists of two stages.

Stage 1: Define an overall sampling frame for the settlements within a zone affected by the disaster. **The sampling frame is the list of the overall number of** settlements from which the sample is drawn. In an urban or peri-urban setting, the settlements may be different neighbourhoods (including slum areas). In rural areas they will be villages or hamlets.

Stage 2: Once the list has been drawn up then **sample settlements will need to be selected**. **Depending on the size of the zone, and the degree of exposure** to the event, a decision about the number of settlements to select within it will need to be made. This will depend totally on the geographical magnitude and severity of the problem, accessibility, human resources and time available. After these factors have been taken into account and an overall sample size decided

upon, one way of proceeding is to select settlements at random within each zone (adjusting for severity of exposure to decide on size of sample *within* each zone) and then to use the knowledge of local people to ensure that obvious biases are avoided.

2.4 Training of the assessment team

What:	Training the assessment team.
Who:	DLA team leader (if training done after the disaster event).
Indicative timeframe:	3 - 5 days.

2.4.1 Some considerations

Whether the training takes place as part of pre-disaster preparedness programme or after a shock, at least three days will be needed to prepare the team for conducting the DLA using semi-structured interviewing techniques. A further day may be necessary in the case of an inexperienced team and/or if certain PRA tools are to be used in the assessment itself. Also, it may be necessary in the case of a pre-existing team to carry out a one day 'refresher' training for team members after the shock. All training after the emergency event should take place at or near the disaster site.

Bearing in mind the need for flexibility, the following section gives some guidelines on a possible structure for DLA training.

Planning: It will be necessary before the training to identify an area and specific villages or neighbourhoods where the Field Test can take place, which should be as near as possible to avoid excessive travel. Permission should of course be sought from relevant authorities, including community leaders.

Translation: There may be a problem with language. The DLA will almost certainly need to be presented to key policymakers in a major international language, but it is possible / likely that this will not be the first language of most of the DLA team. If field data is collected in the local language, it will be necessary to have sufficient translation capacity to enable checklists to be translated quickly and well.

Trainers: When training after the emergency event, it may be necessary for the DLA team leader to act as facilitator. Look for other sources of capacity to help facilitate, and the NGO community is one of the most obvious places to look.

Trainees: There will be a trade-off between having a large team or more than one team which will allow assessment of a larger area (or a smaller area more quickly), and the increased difficulties that may be experienced in managing a larger group, or with more than one team. It may be necessary to recruit a local team leader, and this may be essential to provide the appropriate language skills. When in the field, the group should work either in sub-team pairs, or individually if the person concerned is very competent. If a pair work well together, it is normally better to keep them together, although some shuffling may be necessary where ineffective teams are observed.

2.4.2 Content of the training

The following training schedule covers three days.

DAY 1: THEORY

1. Sustainable livelihoods (SL) approach:
   - The vulnerability context;
   - Livelihood assets - Types of assets and practical examples of Natural, Physical, Financial, Human, Social and Political capital;
   - Productive Livelihood activities, including analysis of the labour market (how rural and urban livelihoods are different);
   - Policies, Institutions and Processes;
   - Livelihood outcomes and aspirations;
   - Applying SL to early recovery – the importance of linking with opportunities and capacities within the local economy;
   - Markets; and
   - Gender specificity (the need for a gender-sensitive analysis).
2. Early Recovery interventions derived from a livelihood analysis: How are they different?
3. Case study / scenario presentation and group work:
   - Working group 1 - What assets have been depleted, how might households be affected. What interventions would you recommend and why?
   - Working group 2 - What are the possible opportunities created by the disaster, and what capacities can be drawn on to take advantage of these opportunities? What interventions would you recommend and why?

DAY 2: PREPARING FOR FIELDWORK

1. Data collection methods and instruments; pre-developed checklists; PRA tools (e.g. proportional piling); and principles about selection of sample units in the field.
2. Ways of working and behaving on survey; Sphere principles; Triangulation; Optimal ignorance and appropriate imprecision; and open-ended / leading questions.
3. Ensuring that the gender specificity is taken into consideration.
4. Discuss and adapt questions / checklists in the DLA for fieldwork – ensure local relevance and acceptability.
5. Plan logistics for the field test on Day 3; and aim to get teams out early and get back early to maximize feedback in afternoon.

DAY 3: PRACTICAL FIELD TEST AND FEEDBACK

Morning

1. Teams should conduct an agreed programme as if doing the real thing – in fact the nearer to the real situation the better. Split the team into pairs and aim to conduct a full set of settlement level interviews plus a market interview: e.g. if one Focus Group Discussion (with community leaders / key informants) and three Semi-Structured Interviews at the household level are planned per settlement, this complete cycle should be finished and a market trader should be interviewed. In addition, teams should make notes as to where they have experienced problems with the approach, checklists, or anything else.

Afternoon / Evening

Teams should gather back at headquarters or wherever suitable. This feedback session should provide the opportunity to fine-tune checklists, discuss problems and issues, and make any changes to fieldwork schedules in the light of reality.

Before the day has been finished, the following should have been agreed:

- Agreed checklists;
- An agreed fieldwork schedule, including:
  - team members (whom is working with whom),
  - days (how many, when to finish),
  - areas, communities and markets to cover,
  - how to share information (maybe an evening meeting every night)
  - when to assemble whole dataset (final collation session and brainstorming).
- A report outline, with agreement about who writes what.

Section 3: Phase 2 - Conducting the DLA Fieldwork

What:	Undertaking the fieldwork at zonal, district, community and household levels; in the filed collation and analysis of information.
How:	Semi-structured Interviewing is the core tool. A variety of other tools may be used if time and expertise permit. Data collation templates are important for collation and analysis of data in the field.
Who:	DLA field teams.
Indicative timeframe:	14 days.

3.1 Methodology

3.1.1 Driving questions

Using the sustainable livelihoods framework as a guide, the DLA fieldwork is intended to answer the following questions:

- How were men and women making a living before the disaster?
- What effect has the disaster had on their livelihoods?
- What coping mechanisms and livelihood strategies have different people/ households developed and how effective / damaging are these?
- What are the opportunities and capacities for vulnerability reducing livelihood recovery within the local economy ('building back better')?
- What types of activities are needed for vulnerability reducing livelihood recovery of the different people, households and communities ('building back better')?

3.1.2 Levels of enquiry

In order to get answers to these questions, fieldwork is conducted at five levels:

- District / area

- Local market
- Community (rural village and /or urban / peri-urban neighbourhood)
- Intra-community gender groups
- Household

At each level, different but complementary questions are asked. This is because certain individuals and groups will be best placed to give information on certain aspects of the disaster sequence and / or livelihood framework and it is important to tailor questioning with this in mind. Ideally, the DLA team should be divided up, so that different individuals or pairs focus on different levels or types of questioning, with pairs coming together during daily analysis sessions to compare notes and triangulate.

At **district level** the focus will be on understanding (i) how different institutions and organizations serving the needs of local communities have been affected by the disaster and what are the prospects for recovery and (ii) getting an overview of the impact on livelihoods in the area. One specific issue looked at this level is the functioning of *local labour markets*.

In addition to these district level discussions, **market trader** interviews are conducted to see how markets for essential food and non-food items are working in a particular area and how these have been affected by the disaster.

At **the local community level**, group interviews will be used to get a general picture of the impact of the disaster on how people make a living in the community and to establish how the community is sub-divided into groups (depending on circumstances this could be in terms of wealth groups,/ ethnic groups /, livelihood types / degree of exposure to the disaster). **Gender focus group** discussions should also be held within communities, with groups of men and women being interviewed separately.

At **household level**, questions will be more specific, and will focus on assets and the coping strategies being used by men and women, girls and boys as a result of the disaster.

The **core tool in** the DLA is semi-structured interviewing (SSI) using checklists**.** SSI is used at each of the levels of district/sub-district; market; community/settlement, gender group and household level. Depending on time and expertise, **additional tools** may be used to supplement the SSI questioning (see Annex 1 in this volume for more details).

The following table highlights the types of information gathered at the different levels of the fieldwork.

Level	Information
Secondary data and national level key informants	• nature, extent and magnitude of the shock/crisis; • geographical areas have been affected; • groups of people have been affected (livelihood types) and numbers, current information and knowledge on level of disruption to livelihood activities; and (including market disruptions).
District / area level	• impact of the disaster on key organizations and enterprises (public, private, international organizations in the disaster affected areas); • general impact of the disaster on the livelihoods of people in the area; and • impact of the disaster on local labour markets.
Market trader / shop keeper	• availability, demand for and cost of essential food and non-food items; and • effects of the disaster on individual retail and wholesale businesses.
Community level key informants	• the most important livelihood activities in the community and when these take place in the year; • the overall impact of the disaster on livelihood activities in the community and current responses; • the potential role of community groups in livelihood recovery; • high priority needs; and • identification of different wealth / vulnerability groups.

cont./

Gender focus groups	• the impact of the disaster on men and women.
Households	• the assets and most important sources of livelihood for the household before the disaster; • the impact of the disaster on the assets and livelihood activities of the household; • livelihood coping strategies; • the main short and longer-term priorities and needs.

3.2 Interviews and focus groups at district level

Goals:

1. To understand the impact of the disaster on key organizations and enterprises (public, private, international organizations) which support productive livelihoods in the disaster affected areas;
2. To understand the general impact of the disaster on the livelihoods of people in the area;
3. To identify possible strategies and actors for early recovery; and
4. To understand labour market impacts

Method: Convene meetings with representatives of several types of key organizations – to get cross fertilisation of views and triangulation. If this is not possible, different key informants will need to be interviewed separately.

3.2.1 General checklist

Goal 1: As it will almost certainly not be possible to interview *each* individual organization affected by the crisis, it will be necessary to talk to representatives of *types* of organization. The following is a list of the types of groups which should be targeted. There are eleven groups, but it may be possible to combine some groups. It should be noted that if all groups were to be interviewed the process could take a number of days. Thus it will probably be important to prioritize. At a bare minimum, it will normally be important to talk to local government officials.

Potential key informants:

- District government (the local public administration, including heads of relevant line agencies);
- Special created government agencies to cope with the crisis;
- Traditional leaders;
- Business organizations' leaders;
- NGO groups (local and international) and civil society organizations;
- Private sector groups: shopkeepers, produce traders, input suppliers, transporters;
- Religious organizations / groups;
- Community-based organizations;
- Women' organizations;
- Youth organizations; and
- Disabled organizations (both general advocacy and specific service providers).

Core questions:

- Who are your clients?
- What kind of activities do you normally carry out?
- How has the disaster affected your activities, and how are you coping with this?
- What are the prospects for recovery of your organization / enterprise?
- What assistance is needed for your recovery in the short term?
- What changes are required for longer term recovery of your organization and reducing vulnerability to similar events in future?

Target time for goal 1: Roughly one hour.

Goals 2 and 3: Here, the core key informant groups should be local government and local leaders.

Goal 2: Impact of disaster on local livelihoods - overview:

- What are the main ways in which people make a living in this area? Probe for differences using relevant categories and try to link to the categories contained in the livelihood baseline e.g.: smallholder farming, remittances, commerce, small industries, wage labour, casual labour, migrant labour.
- Are there difference between men and women in terms of making a living? What are the differences?
- What has been the general impact of the disaster on how people make a living in the area?
- Which groups have been most affected and why? Specifically:
  - By geographical location;
  - By gender;
  - By gender of household head;
  - By trade or occupation;
  - By wealth or socio-economic status;
  - By age (young children, elderly); and
  - Other factors (health or handicaps, ethnicity, etc.).

Target time for goal 2: One hour – 90 minutes.

Goal 3: Possible strategies and actors for early recovery:

- What are the immediate priorities for support?
- What role should be played by each institution, and what resources supplied, in the early recovery phase? (NOTE: information from goal 1 questioning is relevant here).
- What changes are required for longer-term recovery of affected populations and reducing vulnerability to similar events in future? Are the requirements

different for men and women? Possible issues:

a) diversification of livelihood base;

b) policy changes;

c) migration;

d) better housing; and

e) other issues...

Target time for goal 3: One hour.

3.2.2 Labour market investigation at District Level

Owing to its important role as a determinant of livelihood status, the impact of the crisis on the *local labour market* deserves special attention. The key informants for this exercise are as follows:

- Local leaders;
- Ministry of labour officials if available;
- Relevant local government officers;
- Representatives of small business organizations;
- Trade union representatives.

Normal situation:

- Under normal circumstances, at this time of year, what are the most important ways in which households in this area sell their labour? Depending upon circumstances; prompt with the following:

  a) Unskilled agricultural labour (specify);

  b) Unskilled non-agricultural labour (specify);

  c) Petty trading;

  d) Migrant work;

  e) Skilled labour (specify); and

  f) SMEs.

- Roughly what proportion of households in the district would be engaged in these kinds of work? (proportional piling or similar method can be used here).
- What would be the normal rate of payment for such work?
- Are there differences between men and women, girls and boys as to the types of work done and the payment received? Specify.

Impact of crisis:

- What has been the impact of the disaster on the above issues? (proportions of households engaging in different types of labour, payment, differences between men, women, girls, boys)
- What does this impact mean in terms of livelihood outcomes such as food security, ability to send children to school, ability to afford health care?

Opportunities and improvements:

- What would be the most effective ways to improve the situation?
- Are there any opportunities for labour creation created by the crisis that can be built upon?

Target time: 2 hours.

3.3 Market trader / shopkeeper interviews

Goals:

To get an understanding of:

1. availability, demand for and cost of essential food and non-food items;
2. effects of the disaster on individual retail and wholesale businesses.

Method: Interview wholesalers and retailers, and try and get a spread of market stall traders and shopkeepers. As a rough rule of thumb, try to get at least 3 interviews from each group in a town (3 x 4 groups = 12 interviews); there may only be 1 shop in a small village, but get at least 3 interviews from different small villages in the same area.

Target time: 30 – 40 minutes per interview.

3.3.1 Key Information to be collected

As much of the following information as possible should be obtained from the traders and shopkeepers interviewed. The idea is to focus on the commodities that people in the area use for consumption (e.g. staple foods, basic household items like matches, kerosene, soap), food and agricultural production and small business production.

Questions / Issues (to be addressed to market stall traders and shop keepers, both wholesale and retail):

CHECKLIST

Step 1: Listing of items/commodities: the first step is aimed at the relevant traders (for example, the consumption listing question would only be applied to traders selling food and non-food consumption items and so on).

- **Consumption:** List of food and non food commodities that poor people normally buy.
- **Agricultural production:** List of agricultural inputs that poor people normally buy
- **Small-business:** List of basic tools for small and micro-business (e.g. utensils, raw materials).

Step 2: For each of the trader types, ask the following:

Supply issues:

- What are the main items that you sell?
- Approximately how many traders / shop keepers like you were there in this town/ village/neighbourhood before the disaster?
- How many of those are still operating now?
- Where do you get your supplies from?
- Has there been any disruption to supplies since the disaster? Why?
- Roughly how much would you purchase per week or month before the disaster?

- How much do you purchase now?
- Why has it changed? (for e.g. shop damaged, loss of business, lack of money, road interrupted and trucks not arriving).
- If they say there have been fewer people buying, ask what the reasons are. (People have lost income; migrated).
- How do you **usually** get the goods from your supplier to your business? (Have own transport? Hire private transport/use buses? Wholesaler delivers?)
- How much did transport cost before the disaster? How much does it cost now? Why has it changed?
- Do you normally have any paid employee in your business? How many? Are they still working now? if not why not?

Demand issues:

- In relation to the main items that you sell, roughly how much of each item would you be selling per day (max. – min., use local units of price or quantity)?
- How many are you selling now after the disaster? What are the reasons for differences between now and normal times?

Prices:

Ask for current and pre-disaster retail prices of key food and non-food items. Note that for many foods, multiple varieties will be available; ask what type poorer people most commonly buy, and then use that consistently. The list will need to be tailored to suit local circumstances.

For illustrative purposes, the following list was used in the Kashmir earthquake:

Wheat flour	Rice (broken)	Ghee
Dhal – mung	Tea	Onions
Sugar	Salt	Red chillies
Soap (Lifebuoy)	Washing powder (Surf)	

3.4 Interviews and focus groups at community level

Goals:

1. To establish the most important livelihood activities in the community and when these take place in the year;
2. To assess overall impact of the disaster on livelihood activities in the community and explore current responses;
3. To identify the potential role of community groups in livelihood recovery; and
4. To understand current responses and high priority needs.

Method:

- Get together a group of 6 -12 people who know a lot about the community;
- Introduce the entire team and the purpose of the assessment;
- Ask questions on the following topics.

Target time: 2 – 3 hours.

Goal 1: Baseline livelihood sources

- We want to find out the main ways in which people in this community normally make a living (i.e. before the disaster) - make a list of the different things that people do to obtain food and money;
- Ask which was most important to people in the community, second, etc., down to least.
- Find out the seasonality of different activities, focusing on the most important sources of food and income. USE SEASONAL CALENDAR if possible.

Goal 2: Effects of the disaster

- Ask about how the disaster has changed these things:
  1. What (if any) are the changes in the way that people obtain food and money after the disaster?
  2. Which groups have been most affected and why? Specifically:

- By trade or occupation;
- By gender;
- By gender of household head;
- By age group (young children, the elderly);
- By wealth or socio-economic status;
- By geographical location (within the area of the community);
- By ethnicity; and
- Other factors.

3. What changes are expected over the coming months and why?

Goal 3: Community groups

- Ask what functional community groups or organizations are there, how long established, what they do, how many members, how active, etc.

  Examples:

  - Religious groups, churches or organizations;
  - Ethnic groups;
  - Trade unions;
  - Business organizations;
  - Cooperatives;
  - Sports associations;
  - Womens' groups; and
  - Other.

- Who participates in the different groups?
- How has the disaster affected the different groups?
- What role could they play in the immediate post disaster recovery and longer-term rehabilitation?
- Have any new groups been created after the disaster?, what are these groups doing? (e.g.: self-help groups set up by the community; distribution committees set up by external international NGOs).

Goal 4: Responses and needs

- Ask about responses so far: from government, UN and humanitarian agencies, etc. Who has received support, what was it, has any group been missed out?
- What are the immediate high-priority needs amongst the different groups in the community? How should existing responses be improved?
- What concrete and practical things should be prioritized for longer-term recovery of affected populations and reducing vulnerability to similar events in future?

3.5 Gender focus group checklist

It is recommended that where possible a group of women and a group of men are interviewed separately in each community visited. Selection of the groups can be done randomly or through the community level key informants. Those participating in these group interviews are in effect gender key informants, i.e. they will be asked to speak on behalf of all the men and all the women in the community.

Objectives: To understand how the crisis has affected gender roles and what are priorities for support post-crisis.

Method: Take two groups, one male only and one female only, ideally 6 – 12 persons in each group.

Target time: 1 – 2 hours.

- What has been the impact of the crisis on income earned, jobs done and productive assets owned by women and men?
- What are the demographic changes as a result of the crisis, including
  - Numbers of female-headed household de facto and de jure (reasons for, and changes, such as death, migration of male head of household etc.)?
  - Numbers of single male headed households?
  - Numbers of child-headed households?

- Increased burden for grandparents to look after children and find income source?

- For female-headed households, have the following factors changed?
  - Land tenure arrangements (can female-headed own land, etc., what happens to access to land of the household when women are without husbands?);
  - Access to income earning opportunities and social networks without male partner (positive, negative, reasons?); and
  - Dependency ratios (Number of extended household members under the care of the female-headed household).
- What are the ways in which men and women are coping with the current situation?
  - Married men and women living together with children;
  - Single men with / without children; and
  - Single women with / without children.

What would be the most appropriate ways to support men and women to get back on their feet so that they can earn a livelihood and feed themselves and their dependants?

- Married men and women living together with children
- Single men with / without children
- Single women with / without children

3.6 Interviews at household level

3.6.1 Household selection

Selection of households to interview: Within a given settlement, selection of specific households to interview may follow various rules depending on circumstances, and the availability of personnel and time. The overall goal is selecting a sample of households which gives a good spread of the range of situations faced in communities. When combined with the community level and gender interviews this should give a very good idea of the livelihood impacts within particular communities. Some possible sampling procedures follow.

a) **Wealth group stratification**: Through discussions with community level key informants, ascertain the percentage of households whom they would classify in distinct socio-economic groups (for example 'better-off', 'medium', 'poor' and 'very poor'). Then interview randomly chosen from each group. The number could be lower (e.g. 3 households) among the better off and somewhat higher (4-5) among the poor.

b) **Most affected selection:** In a similar manner to the wealth group stratification, through discussions with key informants divide up the community according to the degree by which they have been affected by the disaster (for example 'highly affected', 'moderately affected' and 'slightly / not affected'). These groupings may be related to a number of other criteria such as wealth, gender, proximity to natural hazard etc. (Note that this should be straightforward after reaching goal 2 in the community key informant checklist). Then interview randomly chosen from each group. The number could be lower (e.g. 3 households) among the least affected and somewhat higher (4-5) among the most affected.

c) **Geographical dispersion**: Together with the community key informants take a map or sketch of the settlement, divide it into at sections, and select a random sample of households (perhaps 2-3 per section) so that all parts of the settlement are covered.

3.6.2 Individual household checklist

Goals:

1. To establish the impact of the disaster on livelihood assets, activities and outcomes at the household level;
2. To find out how the household is dealing / coping with the damage / loss of assets; and
3. To establish what are the main short and longer-term priorities, needs and opportunities.

Method:

1. Recommended that DLA team members work in pairs;
2. Interview head of household;
3. Introduce the team and the purpose of the assessment; and
4. Ask questions on the following topics.

Target time: 1.5 – 2 hours.

1. Verification of status

(Depending upon criteria for stratification see previous section 3.6.1).

2. Disaster impact on assets and coping strategies

Introduce with something along the lines of:
"We want to understand your life and ways of making a living before the disaster and then compare it with the situation now so that we can see the changes that have come about as the result of the disaster".

a) Human capital:

Before the disaster, how many people resided in this household (only those who cook and eat together - not the extended family), what was the age and gender of each member; if some member normally worked for some time at some other location (seasonal migration) count that person as a member.

- Ask about the education level of the adults in the household.
- What skills did people possess in the household (farming, carpentry, teaching etc.)?
- Ask about school attendance for children of school age (usually 7-14).
- Ask about health, was anyone sick or mentally handicapped in the household.

Impact

Has the disaster changed any of these things for men, women, girls, boys? for example:

- How many people are living now in the household? Has anyone left as a result of the disaster?
- What about health, any new injuries or sickness, deaths?
- What impact has this had on the household's ability to make a living? (for e.g. fewer people able to work in the fields / increased care burden on women/ loss of employment in local businesses).
- What strategies are being used to cope with the impact?
- Are these strategies sustainable / not sustainable – why / why not?

b) Natural capital:

Before the disaster, what was access to land, water, forest, fishing resources before the disaster? (land owned / cultivated, proximity of fresh water, proximity and availability of forest products, accessibility to fishing areas?)

Impact

- What has been the impact of the disaster on access to these natural resources?
- What do these changes in access mean for the ability of the household to make a living?
- What strategies are being used to cope with the impact?
- Are these strategies sustainable / not sustainable – why / why not?

c) Physical assets and infrastructure:

Private physical capital

Before the disaster, what kinds and levels of *productive assets* were accessed by the household? (e.g. livestock – types and amounts; tools for agricultural and non-agricultural production such as hoes, irrigation infrastructure, shops, sheds, fishing gear, bicycles).

Impact

- What has been the impact of the disaster on access to these private physical assets?
- What do these changes in access mean for the ability of the household to make a living?
- What strategies are being used to cope with the impact?
- Are these strategies sustainable / not sustainable – why / why not?

Housing

Has the disaster had any impact on housing? – physical damage? ability to access building materials?

Public physical infrastructure

- Has the disaster had any impact on access and use of roads and transport facilities?, public water and sanitation supplies?
- What do these changes in access mean for the ability of the household to make a living?
- What strategies are being used to cope with the impact?
- Are these strategies sustainable / not sustainable – why / why not?

d) Financial assets:

Before the disaster what were the main sources of access to finance for the household?

- formal credit? – sources, types, amounts;
- informal credit? – sources, types, amounts; and
- savings – in cash and kind (e.g. livestock).

Impact

- What has been the impact of the disaster on access to these flows and stocks?
- What do these changes in access mean for the ability of the household to make a living?
- What strategies are being used to cope with the impact?
- Are these strategies sustainable / not sustainable – why / why not?

e) Social capital:

- Under normal circumstances, what are the sources of support that households expect to be able to call on for assistance in hard times (clan members, family members, self-help groups, credit and savings groups, church groups, community leaders etc.), and what kinds and levels of support would these sources be expected to provide (e.g. cash – including remittances, food, seed, labour and access to other resources)?
- Under normal circumstances, what are the obligations of the household to provide support for others? To whom would support be provided, how much and in what forms (e.g. cash, food, labour and access to other resources)?

Impact

- What has been the impact of the disaster on these sources of support and obligations?
- What do these changes in access mean for the ability of the household to make a living?
- What strategies are being used to cope with the impact?
- Are these strategies sustainable / not sustainable – why / why not?

f) Formal income and commodity transfers:

- Does the household normally receive income or commodity transfers from formal institutions? – this would include the state, NGOs, UN. What are the types of transfer (e.g. pension, food aid, how much and how often?)
- After the disaster, have there been any changes on the levels or amounts of resources being received from these channels?

3. Needs

- What concrete and practical things can be done to assist households to get back on their feet immediately?
- To restore their livelihood (means of living).
- To restore their quality of life (shelter, health, food, etc.).

Note: Get people to prioritize and quantify these. PROPORTIONAL PILING AND RANKING AND SCORING METHODS ARE USEFUL HERE.

- What concrete and practical things should be prioritized for longer term recovery of the household and reducing vulnerability to similar events in future? (PROBE FOR POLICY CHANGES AS WELL AS STRENGTHENED ASSETS). Include not only the restoration of prior situation, but also training in new skills, developing new enterprises, protecting against future similar disasters, etc.

Note: Get people to prioritize and quantify these. PROPORTIONAL PILING AND RANKING AND SCORING METHODS ARE USEFUL HERE.

3.7 In the field: collation and analysis of information

As the DLA progresses, it is important to capture data right from the outset, and to keep the process up-to-date on a daily basis. One way to do this is to develop information grids for the different checklists using computer spreadsheets. Different grids will be necessary for the different checklists. By having one uniform grid for each checklist, it is easier to analyse information from different groups, households and locations.

An example of such a grid for the household level checklist in one community is given below. Here, the columns consist of key livelihood related issues/ questions and in the rows different households in the community. A matrix similar to this was used in a livelihood assessment carried out shortly after the Pakistan earthquake in 2005.

Example information grid for one village

Household number and type	Main source of livelihood	Key impact of disaster on assets	Coping strategies	Current outcomes	Priority needs Short-term	Priority needs Long-term
Household 1: (well-off - in valley, away from main land slides and cracks).	Remittance: 60%. Milk sales: 20%. Crop sales: 20%.	Human mortality: nil. Animal mortality: 2 milk cows. Buildings damaged / destroyed: 30%. Land/terraces damaged: 50%.	Reliance on remittance – increased to 90%. Rebuilding from own resources. Use own food stocks.	Resilient and soon in a position to help others.	Rebuild shelter before winter.	Restock. Land levelling. Terrace repair.

cont./

Household 2: (poor - on middle slopes, affected by landslides).	NTFP sales: 30%. Migration: 20%. Sale of own labour: 50%.	Human mortality: household head killed. Animal mortality: work oxen killed. Buildings destroyed: Main home badly damaged.	Reliance on government handouts and neighbours' charity. Migration to camps for winter.	Heavily traumatized, food insecure.	Food. Rebuild shelter before winter.	Livestock. Migration support. Skill enhance-ment. NTFP marketing.
Household 3: (very poor).						
Household 4: (middle–class)						

Ensure that data grids like this one are updated every day when the team meets to brainstorm. It may be a good idea to have one person whose sole responsibility is to keep such matrices up-to-date, spending survey days entering data from the previous day's notes. These grids will be important during analysis. It will be necessary to decide on the key issues/questions for the columns prior to commencement of the survey, and this will to a large extent dovetail with, and be dictated by, the question checklists

When the survey is finished there will be a large amount of raw data in the matrices that will need to be summarised, and analysed. The following sections give some guidance on how to do this.

Section 4: Phase 3 - Analysing and Presenting the Information for Use

What:	Conducting detailed analysis of all the information gathered, writing up, disseminating the report.
Who:	Total survey team, supervised by team leader.
Indicative timeframe:	10 - 12 days.

4.1 Analysing the data

When conducting analysis, it is helpful to bear in mind three or four key tips:

- Arranging different sources / levels of information and triangulating;
- Looking for trends, interactions and dynamics and developing the 'story';
- Treating outliers as important – not to be 'smoothed out'.

4.1.1 Arranging different levels and triangulating

By the end of the fieldwork, you will have information from six different levels:

- Contextual information from the initial trawl of secondary data and discussion with key informants at national level. This will include secondary baseline information.
- Assessments of the impact of the disaster on key institutions operating at the district level and an overview of the district wide social and economic impact of the disaster on people's lives
- Market trader / shopkeeper interviews for market analysis
- Community level socio-economic and disaster impact overview
- Gender focus groups
- Specific information on the impact of the disaster at household level and prospects for recovery and intervention.

It is important to place the information at the lower geographical areas into the context of the higher levels, both in terms of the sequence of the later report writing and for the purposes of triangulation.

4.1.2 Key trends

The livelihoods of different groups are always linked. In a rural economy it is usual for the poorer groups to be providing labour for the richer groups. The rural labour market is normally a vital part of the community economy, generating income and food transfers which activate formal and informal input and output markets and flows of people and commodities. Therefore, disruptions to labour markets normally have a number of knock-on effects and it is important to understand and capture these in the analysis.

It will be necessary to look for trends and interactions, aggregate data around them, and summarise what has been found. This process will allow the analyst to capture the 'story' i.e. the key threads of the impact of the disaster on different types of people, and how they are coping. In all of this, it is tempting to exclude 'outliers' on the basis that they do not fit in to a general trend. Such a practice is unwise as such 'outliers' may represent a specific asset, household or livelihood type which has been particularly resilient or vulnerable to the disaster. As such it will deserve some focus.

Patterns in the data will probably already have become apparent during the course of the survey, and it is unlikely at this stage that there will be any surprises. Some issues to bear in mind while analysing and seeking trends:

- There may be trends for a given household type (e.g. 'wealthy' wealth group or a 'moderately affected' household) within a particular geographical area (e.g. within a LHZ/AEZ; or within 1 km of the flooded area). For example, all the landless poor in the highland irrigated AEZ of the area hit by the volcanic eruption and earthquake in Yogyakarta immediately lost a vital source of wage income due to the destruction of the irrigation system in the upper slopes.
- Trends may be clearly evident by geographical area - i.e. people of all kinds losing more of a particular kind of asset just because of their physical location. For example, in the Pakistan earthquake, high altitude groups lost more

livestock, as animals were inside in colder temperatures, and in Yogyatkarta, people in the Bayat area were badly hit by loss and damage to fisheries and aquaculture.

- Alternatively trends may be observed within certain population groups, regardless of physical location relative to the disaster event. For example the poorest may be more affected and vulnerable to destitution as they are unable to migrate;
- A fourth possibility is that there may be obvious trends within a particular asset across all types of households and across widely differing areas (rural, urban, highland, lowland) e.g. where all groups have experienced a loss of roads, clinics and schools. In the Pakistan earthquake all but one hospital in Muzafarabad district was destroyed and 80 percent of schools over a wide are were destroyed (check).

Templates for collating information in the field such as that indicated earlier will be an important tool to help with this kind of analysis.

4.2 Quantifying qualitative findings

4.2.1 Weighting matters

Findings from the DLA cannot be purely qualitative. The process of recovery programming requires numbers, both absolute numbers and proportions or ratios. Studies that cannot provide them run the risk of providing only anecdotal evidence to be used for illustrative purposes only. The time pressure to complete a DLA calls for rapid methods and this has consequences in terms of the precision by which findings are reported and the representativeness of samples drawn. Thus practitioners are also frequently forced to use ad hoc or purposive samples that are small in size and not selected by strictly random methods. However, even in an approximate manner, results must be expressed in a quantitative way, and this section provides some directions in this regard.

The various pieces of information collected may refer to realities of different size. For instance, if one community has 80 percent poor, 15 percent medium wealth and 5 percent better-off households, the sample of 3, 2 and 1 households interviewed in that community should be weighted accordingly to avoid giving

too much weight to the wealthy and too little to the poor. In such a sample of 6 households, the poor are represented by 3 cases (50 percent) when in reality they are 80 percent, and the better off have $^1/_6$=16.6 percent when in fact they are only 5 percent of the community.

The same is valid for communities and zones. If each of two zones have been represented by three communities, but one of the zones is much larger, the three communities from that zone should receive more weight in any assessment of the global situation.

Even if the sample for the DLA is not strictly random, ignoring the weighting issue (i.e. giving every unit the same weight) compounds the problem and amplifies any bias in the study. It is therefore recommended that totals for each major zone and for the total disaster area are obtained with due regard for weighting.

4.2.2 Weighting a sample

To obtain an average for a zone, each particular household, community or sub-zone should be adequately weighted. The general principle is using as weights the ratio between the **percentage in the population** and the **percentage in the sample**.

Example: A disaster area has been divided into three zones (Z_1 to Z_3). In each zone there were various numbers of communities, with varying population, of which just a few communities (and a few households in each) were actually interviewed. The following tables show the symbols used in general, and a particular set of numbers as an example.

The first table shows the calculation of weights for individual **communities** within an area composed of different zones. In this particular case there were three zones with a total of 180 communities (villages, neighbourhoods, or whatever), and three randomly selected communities were visited in each zone.

Communities	Total existing		Selected			
	Symbol	Number	Number	% pop	% samp	Weight
Zone i = 1	j = 1	30	3	16.6%	33.3%	0.5
Zone i = 2	j = 2	60	3	33.3%	33.3%	1.0
Zone i = 3	j = 3	90	3	50.0%	33.3%	1.5
Total communities		180	9			

The 30 communities in zone 1 represented 16.6 percent of all communities in the disaster area, but the 3 selected communities in that zone represent 33.3 percent of all **selected** communities, so that those 30 communities are over-represented. Their true weight is restored by giving them a weight of 0.5. On the other hand, the 90 communities in Zone 3 are under-represented: they make 50 percent of all communities, but are represented by only 33.3 percent of the sample communities. Their appropriate weight is $^{50}/_{33.3} = 1.5$.

Suppose something has been investigated in all these zones, e.g. average size of households, with averages of 3 in zone 1, five in zone 2, and seven in zone 3. A simple average will yield a mean size of five, but a weighted average would require multiplying each zone figure by its weight, and dividing by the sum of weights. This gives a more accurate result:

$$y = \frac{3 \times 0.5 + 5 \times 1.0 + 7 \times 1.5}{0.5 + 1.0 + 1.5} = \frac{17}{3} = 5.6$$

This calculation has used the average for each zone, but this average itself has to be computed from the size of individual households in the sample of communities selected for each zone, and this sample should also be weighted. The following table shows how to compute the weight of households across communities.

Households		Total existing	Total sampled	% population	% of sample	Weight
Zone 1 sample						
Community 1	k = 1	100	10	25.0%	33.3%	0.8
Community 2	k = 2	100	10	25.0%	33.3%	0.8
Community 3	k = 3	200	10	50.0%	33.3%	1.5
Total		400	30			
Zone 2 sample						
Community 1	k = 1	80	10	22.9%	33.3%	0.7
Community 2	k = 2	120	8	34.3%	26.7%	1.3
Community 3	k = 3	150	12	42.9%	40.0%	1.1
Total		350	30			
Zone 3 sample						
Community 1	k = 1	350	10	33.3%	33.3%	1.0
Community 2	k = 2	200	10	19.0%	33.3%	0.6
Community 3	k = 3	500	10	47.6%	33.3%	1.4
Total		1050	30			

In this case, the weighted average for zone 1 is obtained by giving households in each community a different weight, depending on the that community having been over- or under-represented in the sample. Thus in Zone 1 the households in the first and second communities in the sample receive a weight of 0.8, while those in the third community receive a weight of 1.5. In each case, the weights represent the percentage of the community in the zone total, divided by the percentage of the community sample in the zone total sample.

The final weight of a household in the total sample is the product of the two weights: one derived from the selection of households within communities, and another derived from the selection of communities within zones. Thus, for obtaining an overall average, a household in the first community of zone 1 should receive a weight of 0.5 x 0.8 = 0.4, the first correcting the over-representation

of zone 1 in the sample of communities, and the second correcting for the over-representation of community 1 within zone 1.

Application of weights to produce zonal or overall averages or percentages is easy. It can be done with a spreadsheet, by including a column of weights in the calculation. It can also be done with standard statistical software like SPSS or others, in which cases (households or communities) may be weighted and the weights used automatically whenever a statistical procedure is applied.

4.2.3 The use of the baseline for weighting and extrapolating results

Having a good baseline provides grounds for giving adequate weight to rapid assessment findings. On the one hand, it gives basis for giving each finding a correct **relative** weight, as in the examples above, correcting for under- or over-representation in the sample. On the other hand, it provides the basis for **extrapolation** to the scale of the whole area or population, thus allowing for estimates of the total size of the affected population, the total number of jobs lost or livelihoods destroyed.

The weights used for absolute extrapolation are slightly different than the relative weighting used above, but based on the same principle. The general principle is defining a weight as $^{N}/n$, where N is the size of the relevant population and n is the size of the relevant sample. Since $^{n}/N$ is the sampling ratio, N/n is just the reciprocal of the sampling ratio. For instance, if 30 communities exist and 3 were selected in a zone, the absolute weight is $^{30}/3=10$. This would multiply every result by 10, amplifying the results to the scale of the total number of communities in the zone. Averages should be computed by dividing those totals by the sum of such weights, exactly as before. And when samples are multi-step (a sample of communities and a sample of households within selected communities) the final extrapolating weight of households is the product of the partial weights: $(^{Ni}/ni)x(^{Nij}/nij)$ where N is a population size, n a sample size, 'i' indicates the ith zone, and 'ij' indicates the 'jth' household within the 'ith' zone.

4.2.4 Beware of reported means

Sometimes an average about households is gauged from a report obtained from key informants, community elders or focus groups. However, this average or mean may be biased. People, including community focus groups, tend to report on the **mode** (the most frequent value or values) and not strictly on the mean. They tend to omit considering the extremes. For instance, when reporting on the mean size of farms they tend to forget the huge influence of a few large farms on the mean, and report on the average size of all other farms, i.e. the most frequent sizes. Thus in that example the reported "mean" farm size, multiplied by the number of farms in the community does not equal total farm land, because large farms were ignored or understated when reporting the mean size. The same goes for incomes, number of children, and other very unequally distributed variables.

4.2.5 How to account for absent people and deserted communities

If some randomly selected communities are found to be deserted, they should be counted as deserted, to estimate the percentage of deserted communities in the disaster area. However, **after** having made this estimate with the original number of selected communities, some new community may be substituted to achieve the desired number of communities in the sample.

Likewise, deserted households found in the sample should be counted, to estimate how many people have deserted the disaster area within communities that are still populated. However, **after** making this estimate, other households may be interviewed to achieve the desired number of interviews.

4.3 Outputs and uses of the DLA

The immediate output of the DLA is an accessible and solid report of about 30 pages (excluding annexes). This should clearly delineate the impact of the crisis on the ways that people make a living, and should indicate strategies for recovery that 'build back better' i.e. which act to increase the resilience of households, communities and local economies to further events.

The key uses of the DLA are:

- To support preparation of livelihood recovery project profiles for presentation to the government and the international community. These may be prepared for a revised flash appeal or early recovery donor conference, or may indeed be submitted directly to government to be financed partly or fully from its own resources.
- To provide the basis for development of a livelihood recovery strategy for affected areas. This should be linked with follow up action with other related interventions in a way to help the national and local authorities to take informed decisions and formulate programmes and policies
- To provide the basis for advocacy material directed at decision makers and the general public so that the longer term livelihood impacts of the crisis are properly understood.

The table on the following page gives some guidance on the contents of the DLA report, together with an indication as to which parts of the DLA itself should be generating the required information.

Clearly, the information required for most parts of the DLA report will come from multiple sources. These sources will not always agree. Therefore, there will be a high premium on *weighing the evidence, cross-checking, using judgement and triangulating*.

The target audience

- National government (by sector);
- National government (disaster bodies/authorities);
- Local/district government;
- UN Agencies;
- Early Recovery Cluster (UNDP);
- Food Security / agriculture sector;
- Informal livelihoods network;
- International NGOs;

- Local NGOs;
- Donors;
- Elected representatives/groups;
- Community groups;
- Labour organizations;
- Business organizations;
- Peasant organizations; and
- Cooperatives, and cooperative networks and organizations.

Element	DLA reference*
Magnitude and exposure	
Type of shock	• Section 2.1 Initial information collection
Geographical area affected (district / provinces and general agro-ecological characteristics)	
Population numbers in affected areas	
Type of damage	
Livelihood characteristics	
Basic means of making a living before the shock (fishing, farming, casual or steady wage earning, self employed (in commerce, small industry, transportation, etc.), remittances etc. – with rough proportions if possible). Pre-disaster prices of basic goods (especially food) and inputs. All data to be disaggregated by gender.	• Section 2.1.2 Livelihood baseline data collection • Section 3.2 General district level checklist • Section 3.2.2 District level labour market checklist • Section 3.3 Trader and shopkeeper checklists • Section 3.4 General community level checklist • Section 3.5 Gender focus groups • Section 3.6 Household level checklist

cont./

Livelihood impact information	
Impact on different types and groups of people. Differentiated impact on men and women.	• Section 2.1.3 Initial Severity and exposure information • Section 3.2 General district level checklist • Section 3.2.2 District level labour market checklist • Section 3.3 Trader and shopkeeper checklists • Section 3.4 General community level checklist • Section 3.5 Gender focus groups • Section 3.6 Household level checklist
Coping strategies	• Section 3.2 General district level checklist • Section 3.4 General community level checklist • Section 3.5 Gender focus groups • Section 3.6 Household level checklist
Recovery opportunities and needs	
Probable role and effectiveness of markets, existing government and other programmes, local institutions.	• Section 2.1.5 Mapping agency capacity for relief and recovery • Section 3.2 General district level checklist • Section 3.2.2 District level labour market checklist • Section 3.3 Trader and shopkeeper checklists • Section 3.4 General community level checklist • Section 3.5 Gender focus groups • Section 3.6 Household level checklist
High priority livelihood recovery interventions disaggregated by affected population groups (key priorities: most affected, those with largest potential for catalytic livelihood recovery; men and women)	• Section 3.2 General district level checklist • Section 3.2.2 District level labour market checklist • Section 3.4 General community level checklist • Section 3.5 Gender focus groups • Section 3.6 Household level checklist

** Section numbers refer to the section headings in this Volume 4 - Detailed Livelihood Assessment.*

ANNEXES

1. Key Participatory Tools
2. Outline for Terms of Reference for DLA Team Leader
3. Outline of Livelihood Recovery 'Roadmap'
4. Typical Effects of Different Types of Natural Disaster

Annex 1: Key Participatory Tools

1.1 Introduction

Different tools are relevant at different levels and stages of the DLA process. The following table gives an illustration of the types of tools that could be used at different times in the DLA.

Level	Relevant tools	Comment
A. District/sub-district	Core tools:	
	Key informant interviews.	Start with government, and work with them wherever possible.
B. Settlement /community	Core tools:	
	Focus Group Discussions with community leaders (semi-structured).	
	Socio-economic / exposure grouping.	
	Additional tools:	
	Farming and livelihood calendars.	Detail on predominant livelihood or farming systems.
	Proportional piling.	Useful to establish proportions of households in different groups.
	Asset mapping.	Identifies community assets using asset pentagon / hexagon.
	Other tools:	
	Transect walk.	Can help establish overall nature/severity of damage.

cont./

C. Household	Core tools:	
	Semi-structured interviewing.	
	Additional tools:	
	Asset mapping.	Identifies household assets using asset pentagon / hexagon.
	Proportional piling. Ranking and scoring for income and expenditures.	Triangulate with asset mapping.
	Case studies / life stories.	Good for in-depth "human" detail – good for advocacy purposes.
	Ranking and scoring for coping strategies.	See and ask how people are filling gaps in livelihoods.
	Ranking and scoring to identify and prioritize needs.	First identify, then prioritize perceived needs.
	Organizational / institutional Venn diagrams and "mental maps".	Looks at institutions, scope and magnitude of their interaction.
	Vulnerability and resilience timeline.	Plots vulnerability against time.

Details on how to construct and use these tools are readily found in various publications. Examples of useful publications and sources include:

- Mercy Corps Assessment Tools Resource Base (http://assess.mercycorps.org/jiveassess/index.jspa).
- 'Conducting a PRA Training and Modifying PRA Tools to Your Needs: An Example' (http://www.fao.org/docrep/003/x5996e/x5996e06.htm).
- 'CARE Household Livelihood Security Assessment: A Toolkit for Practitioners' (http://www.proventionconsortium.org/themes/default/pdfs/CDRA/HLSA2002_meth.pdf).

Annex 2: Outline for Terms of Reference for DLA Team Leader

1. Introduction

This section should summarize existing information on the magnitude and severity of the disaster. It should also justify the need for a detailed livelihood assessment.

2. Key tasks

This section should include the following tasks.

The DLA Team Leader (TL) will be expected to undertake the following tasks:

Overall:

Take responsibility for overseeing the whole DLA process, from initial data collection, to write up and presentation of the DLA report to Government and integration into other inter-agency processes (such as a Post-Disaster Needs Assessment) as appropriate.

In particular:

- *Development of a livelihood baseline.* The TL will lead and supervise the work of the DLA team in collection and analysis of baseline information during week 1 of the exercise. This will involve gaining access to various kinds of secondary data and discussions with key informants at the national level as appropriate. The TL will be expected to make use of the LAT, particularly Volume 4: Detailed Livelihood Assessment section 2.1.2, and may also refer to Volume 2: Livelihood Baseline and Contingency Plan.
- *Initial severity and impact information.* The TL will lead and supervise the work of the DLA team in gaining initial information on severity and impact of the disaster event during week 1 (see section 2.1.3).
- *Planning for fieldwork.* The TL will be responsible for overseeing all fieldwork preparations including logistics, selection of areas to be visited and training the DLA team in how to conduct the DLA (see sections 2.2, 2.3 and 2.4).

- *DLA fieldwork*. The TL will lead the DLA team in the field. He/she will ensure that high quality and representative information on the livelihood impact of the disaster and the prospects for recovery and support is collected by the team over roughly a 2 week period. He/she will organize the fieldwork according to the guidance given in section 3, modifying as appropriate.
- *Analysis and Write-up*. The TL will lead and supervise the DLA team in analysing the collected information and in writing up the DLA report, making use of the information and guidance given in section 4.
- *Presentations and integration into other processes*. The TL will present the DLA report to government and will ensure that its key findings are integrated into relevant on-going inter-agency processes such as the Post-Disaster Needs Assessment.

3. Qualifications and experience

To include the following:

Required

- At least 5 years experience of leading socio-economic assessments in developing countries, at least some of which should have been in a post-disaster or post-conflict setting.
- Familiarity with standard qualitative and participatory tools and techniques as well as a general understanding of statistical data and sampling.
- A general understanding of the Sustainable Livelihoods Framework and some experience of applying it or similar frameworks in assessment settings.
- Proven capacity to train others in the above techniques.
- Strong analytical and report writing skills.

Desirable

- An understanding of/experience of the cluster system at country level.
- Previous involvement in multi-agency Post-Disaster and/or Post-Conflict Needs Assessment processes.

Annex 3: Outline of Livelihood Recovery 'Roadmap'

The DLA can help to provide the basis for development of longer-term livelihood strategies. These will seek to reduce overall vulnerability and strengthen people's resilience, through interventions that strengthen the institutions and processes concerned. Short-term measures will be dealing with immediate assistance and protection of people's livelihoods. Longer-term measures will continue to look at interventions that protect livelihoods, but will further look at ways in which these can be improved and promoted, adopting the principles of 'building back better'.

Why is a Livelihoods Strategy needed?

The livelihoods strategy will permit government to provide a structured and measured response to the disaster. It will provide the basis for development of a well-defined programme and a detailed workplan. This will offer a framework around which all players, including relevant government departments, can gather round, coordinate, and divide up the work. It may provide a timeline and a clear set of milestones to which implementing partners will have to adhere, and where possible, a budget. It will also provide a clear plan to attract potential donors.

What is a Livelihood Strategy?

A Livelihood Strategy is a medium- to long-term plan, which will provide government and its partners with the conceptual and operational framework through which the livelihoods of those affected by the disaster can be rebuilt. It should be owned by government, and thus be developed closely with them. It should seek to strengthen existing institutions, and not to create parallel structures which are unlikely to be sustainable. It should build itself a clear exit strategy, to ensure that the establishment is not permanently expanded as a result. It may contain the following elements:

- Damage assessment;
- Sustainable livelihoods and guiding principles for the rehabilitation context;
- Institutional arrangements;

- Management structures;
- Vision statement, goal and objectives;
- Interventions for rehabilitation and exit strategy;
- Monitoring and Evaluation arrangements;
- Risks and constraints;
- Logical framework;
- Timeline and milestones;
- Technical annexes; and
- Budget.

Choice of elements will depend on the disaster, the information available (DLA and other damage assessments, technical surveys etc.), and the responsible government body. Where there is one government body appointed for the disaster context[1], the inclusion of a logical framework and budget is feasible. In contrast, where several ministries are involved the strategy provides a tool for inter-ministerial collaboration and a basis for each ministry to draw up its own logframe and budget accordingly.

When should the Livelihoods Strategy be developed?

The DLA team should be thinking about longer-term issues from the outset, i.e. from the design of the DLA onwards, seeking to collect information that will feed into the development of the livelihoods strategy. It may be that members of the DLA will be involved with the strategy, and this should be encouraged wherever possible, to foster continuity and institutional memory. Development of the livelihoods strategy could ideally begin immediately after the DLA has been completed, or failing this as soon as possible.

The main stages of development are likely to depend very much on local circumstances, but a possible sequence follows on the next page:

1 For example, in the Earthquake Reconstruction and Rehabilitation Authority in Pakistan and the Bureau of Reconstruction and Rehabilitation in Banda Aceh, Indonesia (for the Tsunami Response).

Main activities	Duration
Pre-strategy: DLA conducted, results published, possibly shared through workshop/s.	4 – 5 weeks
Strategy development with government authority/ies responsible and other key stakeholders, through a consultative and iterative process .This may involve a series of consultative workshops with government, NGO, private sector and community bodies.	3-12 weeks (depending on number of Authorities responsible, language constraints, logistics etc.)
First draft produced and circulated in the appropriate language/s to all stakeholders for review and comment.	1-2 weeks
Revision and finalization of strategy Stakeholder workshops in all districts/affected areas.	1-2 weeks
Sharing of strategy with donors, possibly along with supporting project concept notes.	1 week
Overall	10-21 weeks

Annex 4: Typical Effects of Different Types of Natural Disaster[1]

Cyclone / typhoon / hurricane

General effects:

- Some damage and many injuries; wind damage to all vegetation, electricity distribution systems and some buildings.

Possible secondary disasters:

- Storm surge causing deaths and injuries, and damage to vegetation and all infrastructure along the coastal belt. Heavy rain and flooding further inland.
- Mud slides.

Likely impact on livelihoods:

- Serious losses of household crops and livestock.
- Loss of productive assets of households.
- Loss of employment in damaged businesses.
- Loss of employment as casual labour on farms.
- Loss of trade opportunities due to damaged market infrastructure (affects both supply and demand).
- Increase in social transfer needs in the context of decreased ability to meet needs.
- Number of IDPs potentially very large.
- Possible temporary work opportunities in clearing debris and reconstruction.

1 This list is drawn from WFP's Emergency Food Security Assessment Handbook (2005).

Seasonal floods

General effects:

- Small number of deaths; damage to vegetation and infrastructure depending on the rate of flow and duration of flooding; erosion (harmful) and / or sedimentation (potentially beneficial – enhancing fertility).

Possible secondary disasters:

- Epidemics of communicable disease.

Likely impact on livelihoods:

- Depending on time of year, rate of flow and depth and duration of flooding, loss of household crops.
- Loss of employment in damaged businesses.
- Loss of trade opportunities due to damaged market infrastructure (affects both supply and demand).
- Increased need for social transfers.

Flash flood or tsunami

General effects:

- Many deaths and injuries of people and animals.
- Severe damage to infrastructure, buildings, agricultural land in the valleys / coastal areas affected.

Possible secondary disasters:

- Landslides.
- Epidemics of communicable diseases.

Likely impact on livelihoods:

- Serious losses of household crops and livestock in affected areas (maybe localised in the case of flash floods).
- Loss of productive assets of households.
- Loss of employment in damaged businesses.
- Loss of employment as casual labour on farms.
- Loss of trade opportunities due to damaged market infrastructure (affects both supply and demand).
- Increase in social transfer needs in the context of decreased ability to meet needs.
- Numbers of IDPs potentially very large.
- Possible temporary work opportunities in clearing debris and reconstruction.

Earthquake

General effects:

- Many deaths and injuries due to collapsing buildings.
- Damage to roads, bridges, dams, water and electricity distribution systems, especially near the epicentre.

Possible secondary disasters:

- Further damage due to after-shocks.
- Fires in urban areas.
- Flooding (if dams are broken or river channels blocked).
- Temporary displacement of large numbers of households.

Likely impact on livelihoods:

- Rainfed crops may or may not be affected significantly. Damage to irrigation systems can have a significant impact.
- Livestock casualties could be high if livestock are housed in stone structures / in the same houses as people.
- Loss of productive assets of households.
- Loss of employment in damaged businesses.
- Loss of trade opportunities due to damaged market infrastructure (affects both supply and demand).
- Numbers of IDPs may or may not be large.
- Possible temporary work opportunities in clearing debris and reconstruction.

Landslide

General effects:

- Death and injuries and almost total destruction of buildings, infrastructure and farm land in the direct path of the slide.
- Broader disruption to marketing systems if major roads are in the path of the slide.

Possible secondary disasters:

- Flooding if river channels are blocked.

Likely impact on livelihoods:

- Crop and livestock losses will be localised.
- Market disruption likely to be less than for other natural disasters.
- Change in local topography and land use possibilities.
- Small scale displacement of families.
- Social transfers will be required.

Volcanic eruption

General effects:

- Death and injuries from lava flows and ash and gas releases.
- Destruction of infrastructure from lava flows and ash falls.

Possible secondary disasters:

- Fires.
- Landslides.
- Flooding, if river channels are blocked.

Likely impact on livelihoods:

- Localized crop destruction.
- Permanent loss of productive land due to lava flow and pollution of soil.
- Employment losses due to damage and destruction of businesses.
- Temporary work in re-building.