

PCR TOOL 4

Assessment of Reconstruction Needs and Resources

Introduction

Assessment of reconstruction needs and resources is essential for successful recovery after a disaster. It ensures that those involved in helping with the reconstruction process both understand fully the needs of the affected people, and have up-to-date knowledge of the available local resources so that any deficit can be met by reconstruction agencies or authorities can. In order to reduce the vulnerability of those affected, these assessments must focus not only on rebuilding and repairing damaged or destroyed houses and infrastructure, but also on rebuilding people's livelihoods and restoring local markets.

Such assessments are also important as they: support communities in rebuilding and recovery; ensure that the planning and coordination of reconstruction activities is relevant and responsive to the needs of communities, particularly the vulnerable; and ensure recovery work is focused on the priorities of disaster-affected people rather than those of civil servants or aid workers. In addition, involving affected communities in assessment implementation, working alongside NGOs and local authorities, enables stakeholders to work in partnership, make informed decisions together, and pave the way for participatory reconstruction.

Field workers involved in reconstruction need to be aware that the vulnerabilities of those affected will vary across a target location. Some vulnerable groups such as the landless, the elderly or those discriminated on the grounds of gender, religion or cast, exist even before the onset of the disaster. Yet the disaster itself will have also created new vulnerabilities: some households may have lost a breadwinner, others may have become disabled, and some people may have lost far more assets than others. Assessments need to be designed to clearly identify all vulnerable groups and their specific needs and available resources. Data collected need to be disaggregated by sex, age, family size and composition, income. The legal status of vulnerable groups with respect to land and property ownership needs to be reviewed.

People's needs and priorities change constantly from the moment a disaster occurs, through the

emergency and relief phases, and into rehabilitation and recovery. This particular tool only focuses on the latter phase, but it does recognise that the various phases overlap, and that reconstruction needs to be planned early on in the process. After a disaster, assessments may be made at various stages. The early assessments of the emergency and relief phases, or those of the needs for transitional housing, can often provide much useful information for planning reconstruction. Such assessments include, for instance:

- The Flash Report, usually produced within 24 hours of a disaster occurring, providing estimates of damage, casualties and the reconstruction task.
- The Initial Report, usually produced within a week, providing more detailed information on damage, casualties and success in meeting immediate needs, by location.
- Interim Reports, which are regular updates of the Initial Report.
- The production of these early reports is not covered in this tool, since they are generally well documented. More detailed information about them by the IASC (2007), Leon (2007), the SPHERE project (2004) and USAID (1998) can be found in 'Resources' at the end of this tool.

How to carry out a needs and resources assessment?

The needs and resources assessment differs greatly from the rapid assessment which is done to determine the immediate needs for relief. In the latter, agencies typically study a sample of 0.1 to 1.0% of the disaster-affected population, and extrapolate the results to represent the whole population. Using such data in combination with GIS images or aerial photographs can provide quite good estimates of immediate relief needs. This method, however, is largely top-down and quantitative. Conversely, planning reconstruction should be bottom-up, qualitative and incorporate the following principles:

1. **Taking time:** Though reconstruction should be planned from fairly early on in the recovery process (possibly starting 3 months after the disaster), time is far less critical than in the planning of the initial relief response (where people's survival depends on the timely arrival of adequate medicine, food, water, tents etc). In the rebuilding of people's houses and livelihoods it is more important to get it right than to do it quickly. Therefore the assessment of needs and resources must be undertaken thoroughly and with the full participation of all those affected, rather than just a sample population. The proceeding section describes a number of activities that could be included in an assessment. These do not necessarily have to be done all at the same time, but could be spread out over a period.
2. **Enabling participation:** If people are to be at the centre of reconstruction, they also need to play a central role in determining needs, priorities and the availability and requirement of resources. There are only a few examples of communities getting organised to carry out their own needs and resources assessment such as: the Civil Defence Committee of the town of Soritor after the Alto Mayo, Peru earthquake of 1990, and the community of Bojaya in Colombia after a massacre in 2002 (see the section on Applications). On other occasions, NGOs have facilitated the community-implemented assessment, for example Save the Children after the tsunami in Sri Lanka.
3. **Using appropriate methods:** The methods used in the assessment need to enable participation. Lengthy questionnaires, requiring statistics to compare or relate different variables may not be suitable for community involvement. Instead proven methods in Participatory Rural Appraisal (PRA) or Community Action Planning (CAP) may be adapted to needs and resources assessments, see. PCR Tool 7: Planning with the People. One appropriate approach may be to meet with people in small groups, and to encourage those groups to identify needs and resources. This would help to identify the range of reconstruction needs across communities, and those groups in need of extra support. Short individual questionnaires may then be used to explore some of the details further. Alternatively, other methods might be found to be more suitable, for example it might be more practical to have a community do a type of wealth ranking exercise, than to ask it lots of questions about incomes or assets. Group dialogues are preferable to individual questioning, as they allow further exploration of the qualitative aspects of reconstruction.
4. **Building trust and sharing information:** Building trust with and between communities is necessary to facilitate the participatory processes, otherwise people might be sceptical or afraid to commit themselves fully in participation. It must therefore be made clear to community members from the onset how the outcomes of the assessment will be used, and under what ownership. If a series of participatory activities are going to be undertaken, starting with the less contentious ones will help to build trust with a group. A good example of such an exercise is producing seasonal calendars or time schedules, or taking stock of economic activities. The more difficult activities, such as stakeholder analysis, are better left to the end once trust has been established. Occasionally, some people affected by disasters may exaggerate their losses to try to get more support. However, despite this, fieldworkers should avoid a suspicious approach - if the assessments are really participatory, then communities themselves are likely to question individuals who are not truthful therefore the fieldworker should allow for this process to unfold. For community members to be capable of making informed decisions about reconstruction, information gained from the assessment should be shared by the fieldworker with all involved, rather than taken to offices and analysed on inaccessible computers.
5. **Including everybody affected:** Meetings with communities dominated by one or two people usually have limited value. Fieldworkers need to be aware of such dominators, and ensure equal attention is given to all participants. Dominators may be those who are better educated, can speak the language of the fieldworker, or who are well-connected to local institutions or politicians. However, they may not always be truly representative, although they may claim to be, and in particular may not represent vulnerable groups. Therefore methods must be used to ensure the voices and views of others are heard; working in smaller groups for example may encourage this.
6. **Coordinating agencies to reduce duplication:** It can be very frustrating for an affected community to see agency after agency come by and ask the same questions about reconstruction. Reconstruction agencies should try to collaborate to avoid duplication and share information.
There are often constraints to carrying out a good assessment. Agencies should try to address these before starting, as they can often be overcome, as shown by the following examples:

Constraints	Possible solutions
Migrant population is difficult to identify and locate	Provide incentives to come to an initial meeting. Jointly decide a good location for meetings and the timing of household assessments
Some community members cannot attend, e.g. daily workers, or women having to take care of children	Provide incentives, e.g. food or childcare when attending meeting
Assessment fatigue	Obtain baseline data from elsewhere; agree joint assessments with other agencies
Access to remote locations	Share logistics with other agencies; get the Cluster to coordinate and support assessments
Power struggles in communities; parts of communities are uncooperative; others are silenced	Divide communities into groups that share similar interests; illicit the views of all members, by facilitating meetings well
Language problems	Use local staff; get community members involved who speak several languages

What should a needs and resources assessment cover?

There has been far more written on the assessment of the immediate needs of people affected by disasters for relief purposes, than there has on the assessment of long-term needs such as livelihoods recovery and reconstruction. However, a lot of information exists on participatory needs assessment, participatory learning and action (PLA), participatory rural appraisal (PRA) and community action planning (CAP) that can be applied to a post-disaster context. Communities may have had experience with some of these approaches prior to the disaster. This experience, alongside the recruitment of local staff knowledgeable in such approaches can help reconstruction agencies to facilitate the assessment more effectively. Reconstruction planning must relate to the needs and resources assessment as well as the assessments of vulnerabilities, risks and damage caused by the disaster (as explained in PCR Tool 3: Learning from Disasters).

This tool does not describe how to perform particular actions or methods as these are already well documented in the approaches listed above (the Resources section at the end of this tool gives more details about methodologies). Instead, it points out the methods that are most relevant for a post-disaster context:

- Mapping of an area – this could be used to describe both the present situation and gain an idea of the pre-disaster context if people are willing to discuss this. Maps could indicate where households are/were living, and where the main infrastructure or facilities are/were located. The exercise could be extended to document property rights in more detail, for example to mark who owns certain pieces of land and what the relations are between landlords and tenants.

This is a tool predominantly used within rural development, but also favoured by Shack/Slum Dwellers International and its affiliated organisations such as SPARC and Homeless International in their work on slum upgrading. In the latter case, it is often used together with enumeration, in which community members themselves survey the shacks and other assets of people living in the settlements (see, for example Patel, or Schilderman & Ruskulis, in the Resources section). Mapping can be done using pens and sheets of paper, or using sticks and stones on the ground. The facilitating fieldworker should photograph them, when finalised, to keep a permanent record.

- Transect walk – a walk around the damaged settlement with a representative group of community members. This is useful to check previous damage assessments (as documented in the Initial Report and Interim Reports) and



Street in Moquegua, Peru after the 2001 earthquake. Some houses appear to have little damage, but the one in front has lost its roof and may have to be rebuilt.

to consider what facilities, infrastructure and houses are repairable or need to be rebuilt, what materials could be recycled, and what additional resources might be needed.. It can also be used to document and discuss issues of land ownership and tenure, and to take stock of any unused land that could serve as an overspill area or for relocation. Land tenure can pose difficult problems after a disaster, particularly where ownership is informal. A series of tools and case studies for addressing post-disaster and post-conflict issues of land tenure are under development by the UN-Habitat Global Land Tool Network, but these are still at an early draft stage (see the Resources section).

- Wealth and vulnerability ranking – this is particularly important for identifying people with the greatest need, who may require additional support in order to participate actively in reconstruction. It can be done using various stones, twigs, or pieces of paper to represent different assets.
- Pillars of survival – this is essentially an assessment of people’s livelihoods and coping mechanisms. It examines how people cope in normal circumstances and what they do when their livelihoods come under stress. It documents how many strategies people have to cope with stresses and what these are. It can also help assess people’s vulnerabilities and capacities.
- Defining economic activities – this is where people are invited to describe how they earned an income, currently and before the disaster, Those with similar occupations can then form smaller groups to discuss issues specific to their livelihood and determine what support they would need to recover.
- Emergency Market Mapping Analysis (EMMA) and Participatory Market Systems Analysis (PMSA) – these are participatory methods to analyse market systems, in emergency situations or normal conditions respectively. The analysis is done with the participation of actors all along the market chain, and aims to identify and resolve bottlenecks. These are important tools as they help to determine for example whether the materials necessary for emergency shelter or reconstruction can be provided through regular market chains, or how local markets and the livelihoods that depend on those can be restored (See: Albu (2010) and Albu and Griffith (2005) in the Resources section).
- Drawing up of seasonal calendars – these are particularly important when people rely on farming. They can highlight windows of downtime in farming activity which can be utilised for reconstruction activities instead. Daily schedule timetables can also be useful, particularly



photo © Practical Action, Bangladesh

Men carrying part of a destroyed house after floods in 2004 in Gaibandha, Bangladesh. Materials or components that can be recovered from destroyed or damaged houses form part of the resources available to the community.

to highlight women’s daily activities that are often under-represented in other assessment methods.

- Stakeholder analysis – this is used to identify the stakeholders in the development of the area, and how they interact with each other. It is useful for communities to consider how the stakeholders have changed as a result of the disaster.
- Capacity Analysis – this aims to identify what skills local people have that could be used in reconstruction. Linked to this are community managed resources such as seed banks or savings and credit activities that can facilitate people’s reconstruction and recovery efforts. Local capacities can be identified through broad assessments such as SWOT (strengths, weaknesses, opportunities, threats) or through individual capacity analysis. Developing local production and markets for building materials can be important for stimulating the physical reconstruction process - communities become less dependent on outside materials that can be subject to fluctuating prices and availability. This may require a local resource assessment, (of materials such as clay, soil, aggregates, stone, timber or bamboo).

In some circumstances it may not be necessary to undertake all the above activities in each location. For example: when some of the information is already known from official figures; agencies have already worked with target communities before a disaster; or information has been collected in earlier assessments. The requirements needed to obtain a full assessment must be determined on a case by case basis. The above activities are generally relevant when reconstruction is taking place in the original community location. In some cases communities

have to be relocated to a new site because of high risks in the original settlement area. Here the priorities of the assessment will have to shift; the historic assessment of the old sites will be less relevant, including the mapping, transect walk, calendars and economic activities, and attention will have to be more focused on future livelihoods opportunities and resources available at the new site.

At various stages of the assessment, groups may discuss the results obtained from each particular method. Towards the end of the assessment, results from all the various methods must be brought together for the community to discuss either as a whole or in specific relevant groups. The aim of this is to draw conclusions and prioritise the needs and issues to be addressed. Focus groups are a useful tool for this process:

How to facilitate a focus group discussion?

- Keep the size of focus groups to no more than about 15 people, to ensure everybody has a chance to contribute, and discussion can progress; if necessary, establish several groups;
- Consult community leaders and key informants to identify participants, but be aware of preferences; ensure a reasonable gender balance and that particular groups of vulnerable or marginalised people are represented (the disabled, lower castes, the very poor, the landless, etc.);
- Determine a time when everybody should be able to attend (which may have to be after work or in the weekend), and invite participants well in advance;
- Find a comfortable location for the meeting; arrange snacks or drinks when appropriate;
- Do not try to cover too much in a single meeting; focus on a few key topics (and hold a second meeting, if there are more); discuss one problem at a time;
- Start the group discussion with an explanation of the purpose of the meeting and the topics to be covered;
- Maintain respect, listen carefully, and check for understanding;
- Move the meeting along to keep it on track, whilst involving as many participants as possible in the discussion;
- Try to identify which issues are of general concern to the whole group, and which ones may be more controversial or personal in nature;
- Look for potential spokespersons from different groups, who could be asked to meet to summarise their groups concerns and discuss how they differ from others.

(See: Rietbergen-McCracken & Narayan, 1998, in the Resources section)

Applications

Case Study 1: Communities assert their demands and produce their own needs assessment in Bojayá, Colombia

Following the Bojayá massacre of 2002, communities boycotted food aid provided by an agency which only wanted to provide food to families listed on old census records. This excluded many vulnerable households who were not registered. Community representatives demanded that a new census be carried out. As a result, community organisations carried out a new census and needs assessment amongst the 7,000 or so people displaced by the massacre. They compiled the needs of people and turned to various agencies for assistance. The World Food Programme supplied food which communities distributed themselves. After several community meetings, the people subsequently decided that they wanted a new location for their settlement. They produced drawings for it, indicating landmarks such as the church, town hall, town square, port and community centres. They also produced house plans together with building materials specifications for each household. Government engineers then formally drew these up.

See ALNAP in the Resources section.

Case Study 2: Strong community organisations are an important reconstruction asset in Soritor, Peru.

After a moderate earthquake struck the Alto Mayo region of Peru, local initiatives of relief and reconstruction varied a great deal. The Frente de Defensa de los Intereses del Pueblo (FEDIP) in the small town of Soritor, of 4,000 inhabitants, was a strong organisation, geared to come up for the interests of inhabitants and defend them against resurgent movements active in the region, such as the Tupac Amaru. Soritor was organised in 6 neighbourhoods, each of which had a neighbourhood committee. These met to discuss the needs for relief and reconstruction. Where chaos reigned in other villages and towns, there was order in Soritor, even though it was one of the settlements most heavily damaged. Within 12 hours, FEDIP had made a census of damaged buildings, and people in need of support. A few days later, and by communal decision, a series of measures was taken which included the demolition of 90% of affected rammed earth houses, and an organised selection of beneficiaries of external humanitarian aid. Thanks to FEDIP, it was also easy for the NGOs Caritas del Peru and Practical Action to initiate a participatory reconstruction programme in Soritor, and to expand it into the Alto Mayo.

See Monzón, Zambrano and Núñez in the Resources section.

Case Study 4: A participative needs assessment supports rather than undermines community livelihoods in Peru

Following devastating floods in Peru (location not disclosed) the community drew a map of where they used to live. This showed their traditional homes and agricultural and pasture land. Reconstruction experts had planned to relocate the settlements to a safer urban area. However, when it became clear how important agriculture and livestock were for the livelihoods of many households, they altered their plans and the new settlement was built much closer to the traditional lands so that people could continue with their agricultural activities.

See PACA in the Resources section.

Case Study 5: A study of the market for corrugated iron sheet in Haiti

On January 12th, 2010, a devastating earthquake hit Haiti. Initial estimates were that between 180,000 and 300,000 houses needed to be rebuilt. As a result, 1.4 to 2.7 million GCI sheets would be needed, but questions arose as whether the roofing sheet market would be able to supply these. A consortium of 10 NGOs, under the leadership of the International Rescue Committee undertook an Emergency Market Mapping & Analysis (EMMA) of the GCI market, about one month after the disaster. Amongst other things, it concluded that the market chain was broken, particularly at the retailer/consumer end. The decreased purchasing powers of consumers had resulted in low demand, causing the market to ground to a halt, with importers unsure how to react. It might take several months to get a regular flow of sheets going again. Humanitarian NGOs could import their own stocks, but this would require huge storage capacity, and would not benefit retailers or local livelihoods. The report therefore recommends that vulnerable households should be issued with GCI vouchers which they can reclaim at retailers. Retailers would be issued with grants or credits to rebuild their shops and restock, and would receive support in negotiating with traders to maintain access to stocks.

See International Rescue Committee in the Resources section.

Case Study 6: A network to mitigate and respond to disasters in the Philippines

Many areas of the Philippines are at risk from multiple disasters – typhoons, earthquakes, volcanic eruptions, landslides and armed conflicts. As a result the awareness of and responsiveness to disaster risks is very important. Preparedness, risk reduction and response is the responsibility of everybody and not just the government and emergency organisations. The Citizens' Disaster Response Network is formed of local and regional organisations, mostly NGOs, working to mobilise local people to understand, plan for and mitigate against local disaster risks. These organisations are active during quiet periods as well as following disasters. The network prioritises understanding and reducing vulnerability. Its underlying objectives are to: recognise people's existing capacities and aim to build on these; strengthening people's participation in the processes; and formation of active grassroots groups that combine the involvement of the most vulnerable groups as well as people considered least vulnerable. The network has grown and its members utilise a number of assessment tools both after disasters and for their mitigation. These comprise:

- Hazard, Vulnerabilities and Capacities Assessment, carried out mostly when no disaster has occurred, with the aim to reduce disaster risks;
- Damage, Needs and Capacity Assessment, generally carried out with communities soon after a disaster;
- Capacities and Vulnerabilities Assessment, carried out after the emergency phase, to support communities in rehabilitation and in mitigation against future disaster risks.

The Damage, Needs and Capacity Assessment is undertaken by community or people's organisations. Leaders of such groups complete a form based on discussions with their members who have been affected by the disaster. They discuss the event and how it affected people, people's responses and capacities, immediate needs and priorities, what assistance they have received, and communication and coordination by the agencies with the community. For the Capacities and Vulnerabilities Assessment, staff from the regional and local organisations together with community members develop a matrix that shows categorises vulnerabilities or capacities of particular communities into: physical or material; social or organisational; motivational or attitudinal, disaggregated by economic status and gender.

See Heijmans and Victoria in the Resources section.

Resources

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Acknowledgements

The Toolkit on PCR has been developed through institutional collaboration between Practical Action and the International Federation of Red Cross and Red Crescent Societies. The collaborators are particularly thankful to Otto Ruskulis, who produced an early draft of this tool, and to Sophie Ault, Vasant Pullenayegem and Aziza Usoof for their contributions and comments.



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