Introduction

Reconstruction after disaster poses a number of challenges. Many problems and difficult issues can be resolved by stakeholders talking to each other. Communities themselves often have a wealth of indigenous knowledge, accumulated over many years through experience. A lot of that knowledge can be very valuable in reconstruction. In addition, any society has members who are known for their specialist knowledge of certain issues, and who are frequently consulted by community members, if they have to resolve such issues. These could, for instance, be local builders, teachers, administrators or charity workers; seeking them out as sources of information does pay off too. Within this context, reconstruction practitioners bring their own knowledge and experience. Combining all these sources of knowledge usually does advance reconstruction a long way.

However, sometimes a problem arises, that none of the stakeholders have the knowledge to resolve. In such cases, finding information from outside the stakeholder group is important, and it will often be up to the supporting agency to find it; this tool helps practitioners do so, in a generic way. Each reconstruction activity has different needs for specific information; it is impossible to cover such specific requirements in a small tool. What this tool sets out to do, therefore, is to point practitioners in the direction of potential sources of information.

Principles of information sharing

1. People-centred reconstruction (PCR) aims to empower the people affected by disasters, so as to reduce their vulnerability to future hazards. This has to start with practitioners respecting local people and their indigenous knowledge, and making an effort to enable people to learn from the reconstruction process and increase that knowledge.

2. Practitioners offering external information to disaster-affected communities should do so in the spirit of enabling those communities to make informed choices on recovery or reconstruction. They should therefore try to offer a set of options, e.g. on how to build, and then guide people to select preferences amongst those in an impartial way.

3. Information needs to be communicated to affected people in formats they can easily understand. For more on this see Tool no.9: Communicating better building.

4. Building back better to mitigate the risks of future disasters is important. This requires developing a better understanding and raising awareness of the various disaster risks and how these can be mitigated. The most recent disaster is what is most in people's minds; that is why in Aceh, initial reconstruction wrongly paid much more attention to the risks of tsunamis that of earthquakes, which are much more frequent.

5. In order to become less vulnerable to future hazards, communities need information not just on reconstruction but also on livelihoods recovery, and to develop a better understanding of the relation between livelihoods, vulnerabilities and disasters.

6. Practitioners have to address the needs of all groups within the communities they are working with, and particularly those of the most vulnerable, including tenants, squatters, people who have lost family members, and the disabled. Some of those groups may require specific information targeted to their needs.
Sources of Information

Practitioners looking for information to support communities in their recovery and reconstruction have three main sources of information:

- Institutions in the same country, but outside the affected communities
- Published information
- Electronic information

Some nationally specific information will be required in most cases; this could include baseline information and statistics of various types (e.g. on poverty, livelihoods, family sizes, construction, building materials production); housing or building laws, codes, standards and procedures; financial and credit options and procedures; and cultural norms and practices. This often is not available in any great detail at the local level nor electronically. Practitioners could obtain this from specialist agencies, e.g. a National Bureau of Statistic or National Bureau of Standards, but this is time consuming. It pays off for reconstruction agencies to get together and pool their information into a joint data base, accessible to all, especially after large-scale disasters, or establish other forms of information sharing, such as coordination meetings or forums.

Published information can come in a variety of formats, e.g. books, manuals, technical leaflets or newsletters. This tool will only consider published information that is available in the public domain, though often at a price; it excludes information published by agencies for use by their own staff only. There is often a limit as to the number of publications that practitioners can carry to their project sites, or get sent there, so they will have to be selective.

Electronic information is nowadays becoming increasingly important, as there is so much of it, whilst it permits users to search for what they specifically need. Laptop computers have become essential pieces of equipment for practitioners, which allow them to tap into a vast amount of information, provided they can connect to the internet. The most important electronic sources include websites, DVDs, CD-ROMs and electronic communities of practices or discussion forums; e.g. Googlegroups on specific topics have become among the most effective and far-reaching tools to exchange knowledge.

Accessing and selecting information

There is now so much information on reconstruction in the public domain that it can be difficult for practitioners to find what they are looking for. Another problem is that not all accessible information is of an adequate quality. Practitioners can assess the quality of the information at hand, e.g. by:

- Ensuring it is from a reputable source, with experience on the subject;

Recommendations for searching electronic resources

1. Resources in which the information has already been structured and organised are easier to search in than unstructured information. This could be in some form of database. If keywords are provided in the form of a drop-down menu, use these in preference to general search conditions.

2. For general web searches with search engines, use the ‘exact phrase’ option, as this would select the most relevant options. Using Google as the search engine, an exact phrase can be entered within parentheses with the Simple Search or in the Exact Phrase Box use Advanced Search.

3. Enter descriptive terms for the information you are looking for in the search boxes of the search engine. Avoid ambiguous terms such as ‘development’, ‘participation’ or ‘community’ and try to use words with a narrow meaning. Try to formulate information searches as questions you are seeking to answer.

4. Use other sources, such as annotated lists of websites, to give direction on which websites to visit.

5. Consult http://www.einstein.edu/how/

This is a guideline on how to search websites for information on healthcare in the United States. It contains demonstrations and tutorial exercises. Even though the instructional information concerns healthcare, most of it is relevant for searching on other topics as well.
• Checking whether the information has been put together in a professional way, in the way it is presented, indexed, referenced, and whether it is accurate and authentic;
• Verifying that it is up-to-date, e.g. was published recently or gets updated regularly;
• Taking into account opinions or recommendations from other practitioners or reviewers.

PCR is about more than just building, and therefore quite a wide range of information resources may be required. Electronic resources can be very useful for that, but searching for what is really relevant can be problematic, particularly when using a general web search. A poorly targeted search can produce endless lists of resources. On such lists, the more useful resources will usually be at the start; therefore a detailed checking of the list could be limited to the first 50, or perhaps 100 results. The risk of this approach is that some useful resources may be overlooked; this can happen if these are on relatively new pages on the web or pages not actively linked to sites, which results in them getting less ‘hits’ and ending up lower on search lists.

Practitioners will require information themselves, to be able to do a better job; most information accessible through e.g. the internet or publications is in a format that practitioners will be able to understand and use, if it is relevant to the project at hand. The same information, however, may be much harder to understand by project beneficiaries, because it may be in the wrong language or too complex given their level of education or experience. Very often, therefore, practitioners will have to adapt and translate such information into formats that are more accessible to local builders and residents. How that can be done is treated in more detail in PCR Tool 9: Communicating Better Building.

ICTs supporting reconstruction in Gujarat
Following a massive earthquake in 2001 three of the main organisations involved in relief and recovery in Gujarat, India, quickly decided to set up a joint information system to avoid duplication of efforts and to be informed about recovery needs, enabling them to prioritise resource allocation. These three were the NGO Kutch Nav Nirman Abhiyan, the United Nations Development Programme (UNDP) and the Gujarat State Disaster Management Authority (GSDMA). Together they established the Kachch Rehabilitation Information Cell (KRIC). This initially provided GIS updates, but was expanded to cover reports of needs and damage assessment and resource allocation as well as regular reports of activities from the field. This regularly updated database was very useful for practitioners working in the villages through 22 resource centres in the area. It contained an assessment of the skills, capacities and resources of NGOs and other organisations working in the area so that they could be directed to support recovery in particular villages based on needs identified there. For further information see the article written on 15/04/2000 by Hemang Karella, UNDP at http://www.iconnect-online.org/Stories/Story.import4923.

The resource centres mentioned are another good element of the Abhiyan networking project, particularly in that they dealt with presenting options for people rebuilding their housing and recovering their assets. For more information on Abhiyan see: http://abhiyan.communicationcrafts.com/

Applications
Practitioners do not usually recount how they have searched for particular information. It has been impossible to detect any actual case studies of information searches on reconstruction, or even related fields. The following example is one of reconstruction agencies collaborating to establish a shared web-based information resource for post-earthquake reconstruction.
Information Resources

What follows is a selection of information resources on reconstruction, under the headings of: web-based resources; published resources; and agencies with resources to provide. Most of them also link to or give details about other resources for information about more specific subjects. Additional specific information resources are suggested in other tools in this Toolkit.

A. Web-based resources – International

1. Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP), hosted by the Overseas Development Institute (ODI), London, UK. The focus of ALNAP is to raise the capacities of its members that comprise many leading agencies involved in humanitarian responses to disasters. The website includes downloadable resources in the areas of learning, performance, evaluation and innovation in humanitarian action, as well as a number of Lessons Papers. The Evaluative Reports Database allows users to search a large range of information sources, many of which can also be downloaded. For further information see: http://www.alnap.org or contact: alnap@alnap.org

2. Best Practice Database in Improving the Living Environment, hosted by UN-Habitat. This database contains thousands of projects on human settlements. Projects are entered two-yearly, following an award competition supported by Dubai Municipality. 2006 and 2008 submissions are described fully, while earlier records are summaries. Only a small number of records cover reconstruction projects, but several others offer insights that could be useful in a post-disaster context. For further information see: http://www.bestpractices.org or contact: bestpractices@unhabitat.org

3. Building Advisory Service and Information Network (basin). The main focus of this site is on construction technologies, with some additional coverage of social, economic and environmental issues in human settlement. It contains some information on the partners, most of whom have reconstruction experience. The principal information source is publications, some of which are downloadable. Unfortunately, very little new information has been put on this site during the past five years. For further information see: http://www.basin.info

4. Building and Social Housing Foundation (BSHF). BSHF works to facilitate the transfer of knowledge and experience through a range of knowledge sharing activities, including community exchange events and international study visits carried out each year to World Habitat Award winning projects (see: http://www.worldhabitatawards.org). Two awards are given annually to projects from the global North as well as the South that provide practical and innovative solutions to current housing needs and problems. For further information, see: http://www.bshf.org/

5. Community Planning Website, established by Nick Wates Associates Ltd., with support of DFID. This web site provides an introduction to community planning, explains its principles, and offers methods, tools, case studies as well as further resources. See: http://www.communityplanning.net

6. DESINVENTAR is an inventory of disasters of various types, large and small, initiated by the Latin American La Red network. Its contents is not limited to Latin America, though, and it does provide a good source of information on the disaster history of a range of countries. See: http://online.desinventar.org.

7. ELDIS, hosted by the Institute of Development Studies (IDS), Brighton, UK. This is a large on-line searchable information resource on many aspects of international development. Several hundreds of its records are directly relevant to disasters; these contain a summary and links to enable downloading, making contact, or ordering a hardcopy. For further information see: http://www.eldis.org (homepage) or contact: eldis@ids.ac.uk. A specific resource guide on humanitarian assistance has also been produced, see: http://www.eldis.org/go/topics/resource-guides/aid/humanitarian-and-emergency-assistance.

8. Global Facility for Disaster Reduction and Recovery (GFDRR), managed by the World Bank, Washington, USA, on behalf of many donors supporting the implementation of the Hyogo Framework for Action. GFDRR prioritises disaster risk reduction, including in recovery. Resources on the searchable database include GFDRR documents as well as relevant World Bank documents. For further information see: http://gfdr.org/

9. Humanitarian Practice Network (HPN), hosted by the Overseas Development Institute, London, UK. The HPN is an on-line network of humanitarian researchers and practitioners. Its website contains all editions of the Humanitarian Exchange Magazine, network papers, good practice reviews, meeting reports and on-line discussions. The focus of much of the site is on academic research, and only a minority of the resources are specifically about
10. International Recovery Platform (IRP), hosted by a secretariat in Kobe, Japan. It was established following the World Conference on Disaster Reduction at Kobe in 2005. It has a very comprehensive website covering, amongst others, recent recovery actions, and many information resources, most of which can be downloaded. The Resources section provides additional details about organisations, discussion forums, training and meetings, case studies, tools and guidelines, projects and news. The site is regularly updated. For further information see: http://www.recoveryplatform.org/ or contact: irp@recoveryplatform.org.

11. Open Architecture Network. Architects, designers and engineers are welcome to share their ideas on the network, but the network is not just for professionals. Community workers, not-for-profit groups, volunteer organisations, government agencies, technology partners, healthcare workers, educators and others are also invited to collaborate on projects and share their expertise. For further information see: http://openarchitecturenetwork.org/

12. PreventionWeb, hosted by the UNISDR, Geneva, Switzerland. This source focuses on disaster risk reduction and contains a range of searchable electronic documents, multimedia, maps and other resources. For further information see: http://www.preventionweb.net/english/ or contact: isdr@un.org.

13. ProAct Network helps vulnerable communities improve their resilience to disasters, climate change and humanitarian crises through sustainable environmental management. Its website contains information on environmental management, both to reduce the occurrence of disasters, and after disasters have struck, as well as tools for environmental assessments. For further information see: http://www.proactnetwork.org/proactwebsite.

14. Reliefweb. This is a regularly updated news and information service about disasters and conflict. It contains comprehensive details of statistics and the recent history of disasters and emergencies of all countries, information on appeals and funding, policy and issue resources that link to more detailed documents of many organisations, links to communities of practice, details of training opportunities, a directory of information providers, and maps. Significantly there is information about all events classified as emergencies or disasters, not just the large-scale ones that normally get most media attention. For further information see: http://www.reliefweb.int/

15. Shack/Slum Dwellers International (SDI) is a global network of slum dwellers; its main focus is on urban upgrading, but it also takes action when disasters affect urban low-income communities, and one of the few sources on urban reconstruction. For further information see: http://www.sdinet.org

16. Shelter Centre, Geneva, Switzerland. This is a specialist resource centre on shelter in post-conflict and natural disaster situations. The site provides news, a comprehensive searchable online library on shelter and disasters, and details of training events and biannual shelter meetings. Library records are shown as summaries, with a link for downloading, and also direct users to other related records on the site. For further information see: http://www.sheltercentre.org/ or contact: info@sheltercentre.org.

B. Web-based resources: Regional

1. Asian Disaster Preparedness Centre (ADPC) is a leading regional non-profit organisation based in Thailand, mandated to promote safer communities and sustainable development through disaster risk reduction. For further information see: www.adpc.net

2. basin South Asia, hosted by Development Alternatives, New Delhi, India. This is a regional section of the basin network mentioned previously. It contains more recent information than the global basin site, including resources on reconstruction, e.g. in Gujarat. For further information see: http://www.devalt.org/da/hsb/basin/basinsouthasia/

Information centres such as this one in Bangladesh can provide access to web based resources to local residents and builders.
3. Centro Regional de Información sobre Desastres América Latina y el Caribe (CRID). This is a very large information source on disasters in Latin America and the Caribbean. Most information is in Spanish, but it contains documents in English that have wider relevance. Users can search the database, but some of the resources have also been collated as thematic CDs, that can be ordered from the resource centre. For further information see: http://www.crid.or.cr/ or contact: contactenos@crd.or.cr.

4. Duryog Nivaran is a network of governmental and non-governmental agencies in South Asia, established in 1995, to share experience that can help reduce the vulnerability of communities to disasters and conflicts. See: http://www.duryognivaran.org.

5. La Red, a network for social studies into disaster prevention in Latin America, was established in 1992 by a group of 16 disasters specialists representing the public sector, NGOs and academia from a range of Latin American countries. It has since grown and produced a range of social and policy studies. La Red also established the DESINVENTAR disasters inventory (see under A). For more information, go to: http://www.desenredando.org.

C. Published Resources


7. Lyons, Michal and Theo Schilderman (editors), Building Back Better, Delivering people-centered housing reconstruction at scale, Practical Action Publishing, Rugby, 2010. This book examines the context for reconstruction, and shows how developments in housing, participation and livelihoods have changed and enriched approaches to reconstruction. It also explores how people-centred reconstruction can happen at scale through in-depth case studies of recent large reconstruction programmes and projects.

8. Office for the Coordination of Humanitarian Affairs (OCHA), Shelter after Disaster, Geneva, 1982. This is one of the first books to take
a systematic look at reconstruction after disasters; much of its contents is still relevant to-date.

9. Office for the Coordination of Humanitarian Affairs (OCHA), Shelter Centre, Department for International Development (DFID), Shelter after Disaster: strategies for transitional settlement and reconstruction, United Nations, Geneva, 2010. This handbook advises on the planning and implementation of 6 transitional settlement options for displaced people, and of 6 transitional reconstruction options for non-displaced people. The book contains key references and internet resources, and comes with a CD that has references as pdf files or sometimes as full documents. See: http://www.sheltercentre.org/library/Shelter+After+Disasters

10. Practical Action Publishing, Building for Safety series, a set of four books produced in the mid 1990s on various aspects of building for safety. They are now somewhat dated, especially where it comes to further references. These publications are available from the Development Bookshop. They are:


11. SPHERE Project, Humanitarian Charter and Minimum Standards in Disaster Response, Geneva and OXFAM Publishing, Oxford, 2004. The standards developed under the SPHERE project apply in the first place to the emergency and transitional phases after a disaster. Many would have to be increased for permanent reconstruction. Some of the principles of SPHERE, though, e.g. with respect to the participation of disaster victims, remain relevant throughout.

See: http://www.sphereproject.org

12. Twigg J., Good Practice Review – Disaster risk reduction, mitigation and preparedness in development and emergency programming. Humanitarian Policy Group Network Paper Number 9, Overseas Development Institute, London, March 2004. Not all chapters of this document are equally relevant for reconstruction practitioners, but the following could be: project planning, partnerships and stakeholders, vulnerable groups, community-level risk reduction, participation, indigenous knowledge and coping strategies, choosing technologies for disaster reduction, and managing urban risk. Each chapter contains a list of further references with a web page address, if the reference can be accessed there. This document is very useful for the many short case studies included of actual projects. See: http://www.odihpn.org/publistgpr9.asp

13. UNDP India, Tsunami, Lessons for Habitat Development, UNDP, New Delhi, 2008. This publication reviews a dozen post-tsunami reconstruction projects and draws lessons and recommendations from those.

7. Agencies with information resources - International

1. International Federation of Red Cross and Red Crescent Societies (IFRC), Geneva, Switzerland has produced a series of resources on reconstruction, see: http://www.ifrc.org/what/disasters/resources/index.asp

2. Practical Action (formerly ITDG), Bourton on Dunsmore, UK. This international NGO works through 7 national or regional offices in the developing world on issues such as vulnerability, disaster risk reduction, livelihoods development, housing, infrastructure and reconstruction. Case studies and other information on its work are accessible on its website: www.practicalaction.org. The group also provides information to fieldworkers upon request through its dedicated enquiry service Practical Answers. Answers to frequently asked question are provided through Technical Briefs, accessible and downloadable through the website. The group’s subsidiary Practical Action Publishing has published and sells a number of books on disasters and emergencies, including the widely respected Engineering in Emergencies, as well as on topics including construction,
infrastructure, participation, small-scale production and micro-finance. To search or order any publications, go to: http://practicalactionpublishing.org.

3. ProVention Consortium, hosted by the IFRC, Geneva, Switzerland. This group pursues disaster risk reduction and building safer communities. It produces a newsletter and has issued numerous publications that can be downloaded from the website. The same site also has links to relevant downloadable resources of other organisations, including some IFRC documents. It also contains significant monitoring and evaluation resources. See: http://www.proventionconsortium.org/

4. UN-Habitat, Risk and Disaster Management, Nairobi, Kenya. UN-Habitat undertakes work in this area with various donors and implementing partners. It has produced resources that include project reports, tools and best practice case studies on this theme. Additional UN-Habitat resources of some related relevance are also listed. See: http://www.unhabitat.org

[All web addresses accessible as of July 9th, 2010]

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.

[All web addresses accessible as of July 9th, 2010]