

South Asia Earthquake 2005

Learning from previous recovery operations

This briefing provides a synthesis of key lessons from post-disaster recovery programmes. Intended audiences include: operational decision-makers and relief/recovery programme managers in the South Asia earthquake operation working on recovery policies and strategies.

This is the second of two briefings prepared by ALNAP (www.alnap.org) and the Provention Consortium (www.proventionconsortium.org). The first briefing, at www.alnap.org/lessons_earthquake.htm, focuses on learning from relief responses to past earthquakes.¹ This second briefing covers targeting, participation, assessment, shelter and housing, risk reduction and policy, drawing out main lessons in each area and highlighting critical sources for further reference. An Urdu version will also be available. Because of the need for brevity and focus, a number of areas covered in the first briefing, such as protection, gender and LRRD, are not included in any depth here. Nor can this paper include extensive detail on the evolving context in the affected areas in Pakistan and India. However, some references for general context are provided under 'Useful websites' on page 14.

TARGETING

LESSON – The need for a pro-poor focus

Given needs assessment to date, it is not clear which groups will need most support, but these are likely to consist of the poorest 20 per cent of households, including: members of female-headed households; widows; orphaned children; the young, elderly and disabled; and the landless poor and squatters (UN, 2005a; MOA/FAO, 2005).

- ◆ While immediate disaster impacts are felt across social groups, **the poor are disadvantaged in recovery, by limited access to resources, and fewer options for recovery.** Because of the devastating impact disasters have on livelihoods of the poor, recovery programming offers particular potential to support poor women and men, and help prevent them descending into destitution. OED (2005b: x) notes: 'Careful poverty targeting and sensitive project design can lead to major poverty reduction impacts even under difficult post-disaster circumstances.' Past practice however has shown that recovery programming is often not pro-poor, that likely poverty reduction resulting from recovery programming is not systematically tracked, and some poor people may end up losing out.
- ◆ Drought conditions over the previous five years may also have increased the vulnerability of the poor, even before the earthquake, by straining traditional coping mechanisms.
- ◆ International agencies in particular have an important **role in advocating for pro-poor policy,** which will challenge the underlying causes of poverty and vulnerability.

¹ Two main sources for the briefings are the ALNAP Evaluative Reports Database and *Review of Humanitarian Action*, and the Provention Consortium's *Learning Lessons from Disaster Recovery*, a review of lessons learned from recovery after five major natural disasters. Other useful sources, including internet links on context, can be found throughout and at the end of the paper.

LESSON – Equity and coverage

For any support – in cash or employment, rebuilding of housing, or roads and bridges – agencies need to ask who is going to benefit over the short and long terms, and carry out sound analysis on the likely **impact on the poor**. Ongoing and coordinated socioeconomic analysis and assessment are key. For example, evaluations from relief interventions suggest that targeting of individual housing has proven problematic (ALNAP, 2002). Housing is a major resource and it has been common to provide houses to only a proportion of the affected population, or to provide different-quality housing to different groups – raising questions of equity. This may be an issue in Pakistan given local politics, conflict and the difficult terrain. Part of pro-poor policy is the establishment of mechanisms to limit corruption.²

LESSON – Integrated and multi-sectoral programming

This is needed because **poor people's livelihood and recovery strategies are broad-based**, often falling across sectors; and because responses that focus on one sector, such as housing, tend to miss connections to other related sectors such as livelihoods or water services.

The broad collection of actors supporting recovery increases the complexity of planning. Integrated planning and coordination among organisations and across sectors will provide a system-wide perspective³, allowing agencies to make informed choices about where their assistance can provide most impact. For example, Barakat (2003) questions the mandate, capacities and skills of NGOs without prior experience to support longer-term engagement in housing reconstruction. NGOs and other agencies should carefully consider whether direct support to reconstruction, advocacy at the policy level, or other programme interventions provide the greatest impact on broader recovery, keeping in mind the following points.

- ◆ **Government appeals for recovery funding are often met at a rate of only 50 per cent or less.** This may prove problematic, for example for the housing programme in Pakistan, and suggests that, given limited funds, agencies should focus on activities most likely to reduce poverty and vulnerability.
- ◆ **Relief and recovery will take place simultaneously, and will overlap** in many cases, with different groups needing different kinds of support. **Phasing** of response should follow where possible the expressed needs of the affected population, rather than the timetable of outside agencies.
- ◆ Promotion of **gender equality usually receives little or no attention.**⁴
- ◆ **Recovery projects are often too short to address real needs.** Post-disaster recovery is set within two timetables. The first is real-time, which can take five years or more. A second, shorter timetable is set by donors, partly because of pressure to disburse funds. Governments have to observe both timetables, balancing the political expediencies of short-term measures against the needs for longer-term recovery.
- ◆ Some recovery needs require **specialised skills or expertise**. Efforts to draw on expert resources by agencies and to support access to those resources by local government and community agencies may significantly facilitate planning and implementation.

² For details on attempts to limit corruption in the post-tsunami response, see the World Bank's nine-month report on recovery in Aceh and Nias (http://siteresources.worldbank.org/INTINDONESIA/Resources/Publication/280016-1106130305439/AcehReport_9mths.pdf).

³ A perspective that takes account of all those acting in response to the earthquake.

⁴ For further details on the gender implications of the earthquake, see http://www.humanitarianinfo.org/iasc/content/documents/subsidi/tf_gender/Key%20Gender%20Issues%20in%20the%20South%20Asia%20Earthquake%20Response.pdf.

■ PARTICIPATION

LESSON – Who is being asked to participate in what?

There is strong evidence that participation of the affected population leads to improved programming and impact (e.g. Marks et al, 2005; Bhat et al, 2005; OED, 2005a; World Bank, 2003a), because it can take into account local context, knowledge and constraints. Working with affected people is as important as providing them with ready-made solutions. Wisner et al (2004) point out the importance of communication in increasing trust and the ability of outsiders and affected populations to work together, for example to establish norms for recovery

There are often real trade-offs between speed and quality of programming, but **evidence suggests that recovery programming could be more participatory**. The value of participation in implementation activities (e.g. rebuilding community facilities) has been widely recognised but more emphasis should be given to planning, design and monitoring of programmes as well to inclusion of **community organisations** and **private-sector partners**. The case of Mozambique after the 2000 floods is representative: ‘community participation in recovery remained rudimentary and generally consisted of providing labor, participation in committees and compliance with a set of rules decided by external agents’ (Wiles et al, 2005, p 12).

More needs to be done in recovery programming in supporting the **participation of women, and particularly poor women, in decision-making processes**, for example around housing reconstruction. Evidence from Pakistan already suggests that communities are becoming increasingly frustrated that the aid they have received is not well targeted to their needs and priorities – and there is inadequate consultation, in particular with women.⁵ Exclusion of marginalised groups is itself a form of corruption that needs to be guarded against.

Broad communication, outreach and dialogue activities can be particularly helpful in enabling **informed participation**, especially in outlining the criteria used for determining how assistance is distributed. Oxfam has also had very positive feedback on the complaint mechanism that the organisation has introduced in Indonesia.⁶

■ ASSESSMENT, MONITORING AND EVALUATION

LESSON – Ongoing and coordinated assessment

- ◆ Assessment should not be a process that happens once, at the beginning of the recovery period, but should be **ongoing, and coordinated among actors**, in order to monitor changes in livelihoods and other material concerns and to ensure input from affected populations into recovery programming as it progresses. Initial rapid survey work should be followed up with more detailed analysis to help identify corrective actions, as rapid surveys, while useful, often miss contextual information.
- ◆ Baselines with relevant **community indicators** need to be developed at the start of the recovery programme, against which progress can be measured.

⁵ Draft community and gender recovery needs analysis carried out in the North Western Frontier Province by IFRC. Further details on participation can be found in the ALNAP/ProVention Consortium briefing on recovery at http://www.alnap.org/pubs/pdfs/ALNAP-ProVention_SAsia_Quake_Lessonsa.pdf.

⁶ For further details, see the description in the November 2005 HAPI newsletter at (<http://www.hapinternational.org/en/complement.php?IDpage=18&IDcomplement=49&IDcat=11>).

- ◆ **Beneficiary profiles** may help to develop specific recovery strategies for the landless poor, squatters, and female-headed households. These groups may require recovery assistance different from that appropriate to others in the same communities.
- ◆ **Local capacity**, particularly of governments and local NGOs, should be supported so that these organisations can play a central role in assessments, monitoring and evaluation. Local sectoral professionals should be included at all stages of ongoing needs assessment as core members of the team.

LESSON – Promote transparency and accountability

In the past, recovery programming has rarely been subjected to systematic independent review. **External audit, grievance-redressal mechanisms, and oversight boards can be key to guarding against potential corruption.** For details on attempts to limit corruption in the post-tsunami response, see the World Bank's nine-month report on recovery in Aceh and Nias at: <http://siteresources.worldbank.org/INTTSUNAMI/Resources/AcehReport9.pdf>.

LESSON – Analyse system-wide effectiveness and impact

The scale and focus of recovery interventions, their longer-term impact, and who benefits, are not reviewed either systematically or from a system-wide perspective. The few evaluations of recovery programming that do exist are piecemeal in that they review one agency's performance, rather than the impact of recovery programming as a whole. Recovery reviews are conducted, but these tend to be internal, with an economic focus. Subsequently there is limited information on whether recovery programming has been pro-poor, and whether livelihoods have been supported, and also a lack of transparency and accountability, despite billions of dollars expended. The recovery programme as a whole should be **jointly assessed by government, international agencies, and other organisations** active in recovery.

Similarly, there is often insufficient focus on incorporating learning from other disasters. The key lessons from past responses on infrastructure, housing and livelihoods should be part of a system-wide analysis, to ensure that past mistakes are not made again.

■ RECOVERY SHELTER AND HOUSING

The World Bank/ADB needs assessment (2005) suggests the following priorities on housing and infrastructure during the upcoming winter:

- ◆ determine losses to establish a baseline and eligibility;
- ◆ undertake seismic and soil investigations, particularly in the most affected areas;
- ◆ conduct training on safe construction techniques;
- ◆ disseminate information on available assistance packages and seismic-resistant designs; and
- ◆ establish property rights.

Box 1: Key resources on house reconstruction

- ◆ The World Housing Encyclopaedia (<http://world-housing.net>) references housing construction types in seismically active areas in South Asia and elsewhere.
- ◆ The sheltercentre (www.sheltercentre.org) is a transitional settlement and shelter forum, hosting regular meetings (www.sheltermeeting.org), a library (www.shelterlibrary.org) and key policy dialogue.
- ◆ The All India Disaster Management Institute (www.southasiadisasters.net) and Seeds of India (www.seedsindia.org) host resources on appropriate design, including structural layout and earthquake-resistant features, with lessons from the Gujarat earthquake.
- ◆ The 'Construction manual for earthquake resistant houses built of earth' is at www2.gtz.de/Basin/publications/books/ManualMinke.pdf.
- ◆ UNDRO's 'Shelter after Disaster' (1982) offers principles and guidance, www.sheltercentre.org/shelterlibrary/publications/172.htm.

LESSON – Policy environment

Support should be given to governments to produce a coordinated strategy as quickly as is feasible.⁷ This strategy should include the development of standards – for community participation and input, seismic upgrading, environmental sustainability, design, transparent and well-communicated categorisation of damage and selection criteria, and partial or total provision of housing. Governments will also need to monitor shortages in building materials in order to manage markets to ensure that prices do not escalate. Lessons-learned reviews from the tsunami and other recent recovery housing programming, and the link between housing and livelihoods, will be especially relevant for policy development. The Gujarat experience after the 2001 earthquake should be particularly instructive, in terms of coverage, development of categories of damage, and grievance-redressal mechanisms (World Bank, 2003).

Fengler et al (2005) have concluded that issues of **land ownership and land rights** need to be dealt with early and forcefully. Barakat (2003, p 9) notes: ‘**A common mistake is to start the reconstruction of permanent houses on the understanding that securing tenure will follow automatically.**’ Where possible, land titles should be regularised, or a functional proxy for land titles provided. Where this is not possible, alternative means should be found to ensure that land is not seized outright or fraudulent claims honoured. Local government should help to control profiteering on land – external agencies have an advocacy role here in holding local government accountable. Community land-mapping activities in Aceh after the tsunami have shown steady, though slow, progress, in facilitating community-driven adjudication of land-title issues (AIPRD, 2005).

Assessments suggest the already degraded environment in rural areas is being further exploited, especially in terms of timber for housing. An example of post-tsunami guidelines for ‘green’ reconstruction in Aceh can be found at: www.worldwildlife.org/news/displayPR.cfm?prID=196.

LESSON – Link rebuilding to reducing poverty and vulnerability

Housing and infrastructure development often account for up to 50 per cent of recovery disbursements. Infrastructure can provide services and access that will help poor people, but **the link between infrastructure reconstruction and poverty reduction** needs to be carefully considered. To maximise recovery impacts for the poor and other vulnerable groups, investments need to be closely linked to broader social and community recovery, and structured in ways to minimise corruption to which infrastructure as a sector has been particularly prone (DFID, 2002).

Links to livelihoods. The literature review by CHF (2005, pp 9, 11) concluded: ‘Most researchers believe that the HBE [home-based enterprise] and other informal income mechanisms are the single most important strategy for these populations [affected by natural disasters]. The role of shelter as an overall platform for increasing incomes... is underappreciated.’ The home is often also a place of work, for example a shelter for small and large livestock, or a base for petty trading and handicrafts. Location and design principles should take into account, for example, the need for secure places to store equipment and materials required for livelihood activities. When necessary, relocation should place people as **close to their livelihood sources** as possible.

Joint titling for women and men should be considered, to promote **gender equality**. The WB/ADB needs assessment (2005) notes that since women in many of the affected areas customarily relinquish their claims to joint family property, the risk of widows and female orphans losing their

⁷ Support to development of housing policy is part of the planned UN recovery framework (UN, 2005a). See <http://siteresources.worldbank.org/INTTSUNAMI/Resources/AcehReport9.pdf> regarding the consequences of delays post-tsunami. See also OED (2005b) on Gujarat and Maharashtra ([http://inweb18.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/9C2C12DA8684ECB585257070007D121F/\\$file/ppar_32515.pdf](http://inweb18.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/9C2C12DA8684ECB585257070007D121F/$file/ppar_32515.pdf)) and OED (2005a) on Turkey ([http://inweb18.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/1F3FE2ED1194CD8E8525704A0056581B/\\$file/ppar_32676.pdf](http://inweb18.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/1F3FE2ED1194CD8E8525704A0056581B/$file/ppar_32676.pdf)).

rightful inheritance is considerable. Women may also take up opportunities for employment in house reconstruction, for example plastering or rubble removal.⁸

Structures for grievance redressal should be set up. World Bank loans after the 1998 Bangladesh floods and 2001 Gujarat earthquake stipulated quarterly audits, and a third-party quality consultant was appointed to audit all houses for their conformity to earthquake-resistant standards in the Gujarat response. Relevant experiences with grievance redressal after the Maharashtra and Gujarat earthquakes are discussed in OED (2005b). According to the Housing Foundation in Iran, housing centres and architectural workshops set up after the Bam earthquake also provided advice and counsel to people on accessing and managing reconstruction assistance.⁹

LESSON – Local resources and capacities

Use of **local labour, builders and materials** should be encouraged. All rebuilding should take place bearing in mind the likely impact on local markets, and potential price rises. In addition, building debris, such as timber and masonry, can be vital to the recovery process and should be collected for re-use or recycling when possible, to decrease exploitation of natural resources. However, UN (2005a, p 16): notes: 'Immediate removing of rubble from the affected households poses legal problems since government compensation is subjected to actual verification of the sites.'

Local **owner-driven** solutions using salvaged material, augmented with lightweight roofing materials and insulation, can significantly speed the provision of shelter and provide important psychological benefits by including affected people in remaking their societies. Barakat notes (2003, p 33): 'Self-build is possible when labour is available, housing design is relatively simple, communities have a tradition of self-building.... Outside support is mostly given through supplying building materials and expert advice.' However, some groups may be unable to construct housing themselves (e.g. the elderly or disabled), and need additional support. Harvey (2005) notes the success of cash grants used for housing reconstruction after a number of emergencies, allowing greater choice and more participation of the affected population.

Box 2: Recovery housing experience from past disasters

A. Preliminary findings from the tsunami response

Despite some good practice, agencies found post-disaster housing interventions difficult. Lack of policy, land tenure, coordination and realistic planning appear to have been particular concerns.

Lack of participatory planning UNDP (2005, pp 2, 6) notes: 'there is a serious lack of information about reconstruction flowing to affected communities which is having a material impact on their ability to recover... Effective strategies for reaching women urgently need to be improved.'

Inadequate attention to design An evaluation of CARE, Oxfam and World Vision's response found serious flaws in the design and implementation of shelter and housing programmes, e.g. failure to recognise the length of time it would take to build permanent housing, and delivery of shelter in India that was: 'highly unsatisfactory, with poor sanitation and drainage and high risk of flooding, fire or other hazards' (Bhattacharjee, 2005, p 24). The UNHCR (2005) risk assessment of its programming found extensive delays and lack provision for water and sanitation.

Inadequate attention to gender issues The WFP real-time evaluation found the objective of supporting housing, community infrastructure and livelihoods problematic, and 'lack of land rights for young, single women; lack of temporary shelter with many men, women and children residing in tents or other makeshift and vulnerable conditions' (WFP, 2005, pp 62, 64).

⁸ For further information, see 'Key gender issues in the South Asia Earthquake Response' at www.humanitarianinfo.org/iasc/gender.

⁹ See the UNDP programme description at <http://www.undp.org.ir/Prevention.htm> for more details.

Delays and limited coordination A World Bank review in Aceh and Nias nine months post-tsunami found that (World Bank, 2005b: xiii): ‘great areas of urban landscape remain nothing but rubble; while tens of thousands of people still remain living in tents – which are now rotting with mould; almost half a million people are dependent on food aid. Unresolved land rights, poor coordination and unclear policies still impede recovery.... Rapidly rising prices are a serious concern. Destroyed road networks caused transport prices to increase by 23.8 per cent during the first 8 months of this year. High marketing and delivery costs led food prices to soar by 28.2 per cent since the beginning of the year.’

B. Findings from the ProVention Consortium review of recovery after major natural disasters

Honduras after Hurricane Mitch

Problems in housing reconstruction were evident, as no relevant policy was in effect when the hurricane hit. No clear criteria existed to determine who was affected, to what degree, and who was eligible for assistance. The lack of a policy on land expropriation and purchase at controlled prices was notable given inflated land prices. Enforcement of construction standards did not take place at the national level; no guidelines were issued on target costs for different categories of housing, and of the estimated 85,000 houses reconstructed, up to half may have no title deeds.

Mozambique after the 2000 and 2001 floods

Provision of housing during the recovery period was one of the most positive interventions for affected populations. The general housing stock was improved in the hardest-hit areas. In the area of housing construction, committees were formed to allocate, inspect and implement the work. External agencies also generally insisted on a gender balance in decision-making positions. In some cases, implementing agencies insisted that housing and land be registered so that women’s rights were recognised. However, there was no standard plan for house construction, so standards varied considerably. Many agencies failed to provide sanitation facilities.

LESSON – Appropriate design and planning

Housing location and design should be culturally appropriate. Rebuilding should be in situ wherever possible, as experience has shown that affected people usually want to stay close to their original homestead. Local customs – including the needs of extended families, the location of the kitchen, the building of verandas, privacy and weatherproofing – should be taken into account.

Plan for the longer term. Barakat (2003, p 1) comments: ‘Short-term housing measures often mutate into permanent, poor-quality settlements lived in by the poor... providing emergency shelter can be as expensive as permanent housing, and spending funds on emergency provision is likely to reduce the amount available for more permanent solutions.’ Housing agencies should consider options for scaling support over time, including shelter solutions which can be adapted and built upon later. Agencies, particularly donors, also need to set realistic timetables.

Link new settlements to livelihoods and services. The challenges of rebuilding houses and planning new villages/towns are distinct. New settlements are often built with little regard to people’s need to make a living, and without links to sanitation or transport services. Settlement layout should follow local patterns where possible, and where this is not discriminatory. Attention is also required to site selection, planning and building-standard codes in order to avoid rebuilding risk at the settlement level. Critical infrastructure also needs to be repaired or rebuilt at the same time as housing. WB/ADB (2005) notes that reconstruction efforts should take into account the need to ensure that rebuilt facilities, especially schools, health facilities, and public offices, are accessible to people with disabilities.¹⁰

¹⁰Infrastructure guidelines issued by the Indonesian government post-tsunami can be found at www.humanitarianinfo.org/sumatra/mediacentre/press/doc/GovInfo/PolicyIssuesforBRR_V02-150905.pdf. Details of camp settlement can be found in the ‘Transitional Settlement’ guide at www.sheltercentre.org/shelterlibrary/publications/112.htm, including definitions of key housing related terms.

■ RISK REDUCTION

LESSON – Persistent risks

Aftershocks and other hazards often put already affected communities at significant continuing risk. Aftershocks can bring down damaged but standing houses, so ensuring seismic safety for emergency and transitional shelter is still a critical concern. Temporary settlement sites too may be located where people are exposed to greater risk of flooding or landslide.

Seismic analysis and broader multi-hazard analysis should be considered as crucial preliminary steps in the implementation of other recovery programmes, particularly housing and reconstruction.

LESSON – Disaster management and community resilience

Experiences in Turkey after the 1999 earthquakes and in Gujarat after the 2001 earthquake have demonstrated the value of investment in capacity building for disaster management. Recommended measures include:

- ♦ strengthening systems for national disaster-management planning, including risk assessment and contingency planning;
- ♦ integration of risk reduction into recovery and longer-term development, including local development plans and livelihoods, and economic development programmes, in order to avoid rebuilding vulnerability – experience has shown that this integration can be very challenging (FAO, 2004);
- ♦ support for capacity-building among community organisations to strengthen community resilience and local-level risk-reduction efforts, such as risk assessment and awareness.

LESSON – ‘Building back better’

Measures to promote risk reduction in reconstruction include the following.

- ♦ Adequate building codes and mechanisms for their enforcement.
- ♦ **Seismic analysis**, including micro-zonation studies, before critical infrastructure and large housing sites are developed.
- ♦ **Working with local communities and understanding customary knowledge** related to risk reduction, to build on coping and recovery activities already being carried out by individuals, households or communities. Wisner et al (2004) note an example in Gujarat where local architects and engineers drew inspiration from customary circular dwellings that withstood the earthquake because of their shape and method of construction. Guidance notes on participation in risk reduction can be found at: www.benfieldhrc.org/activities/misc_papers/PA%20text.pdf.
- ♦ Safe-building and seismic upgrading of both critical infrastructure and housing. Technology for seismic upgrading often exists but must be matched to local building practices, efforts to ensure affordability and access, and effective information and promotion campaigns (World Bank, 2003a, World Bank, 2003b).

- ◆ Provision of schools and hospitals: these facilities provide critical community services as well as important gathering places for rural communities. They need to be adequately reconstructed or upgraded to be safe from future disasters.¹¹ Geohazards and others have also developed resources for school curricula on promoting safe practices (www.geohaz.org).

A comprehensive source for risk reduction after natural disasters can be found in John Twigg's good practice review at www.odihpn.org/publistgpr9.asp.

■ LIVELIHOODS

MOA/FAO (2005, p 21) notes that, in Pakistan: 'The livelihoods of the poorest have been those most hard hit by the earthquake, and they need to be the first to benefit from any rehabilitation work.' UN (2005b) estimates that livelihoods of 1.1 million people have been affected. Building livelihood support into recovery programming is key for two reasons: it recognises affected people as actors, rather than passive recipients of aid; and it can support strategies already in use by marginalised groups which have proven successful. Post-disaster policies, e.g. on housing or risk reduction, need to integrate discussion of livelihoods.

An IFRC review of past recovery programming found: 'Communities consistently stated a lack of involvement in prioritising their needs – the most important of which they felt was securing livelihoods' (IFRC, 2005, p 6).

LESSON – Attention to livelihoods

While the stated objective of much recovery programming has been to support people's own capacities, in practice this has proven problematic. Reasons for this are:

- ◆ the attention given to large-scale infrastructure, where the connection to livelihoods may be less obvious;
- ◆ that many livelihood strategies operate at the micro-level and work within complex social relationships – it is difficult for governments and agencies to intervene successfully at this level;
- ◆ governments' and agencies' limited understanding of, and trust in, the coping capacities of poor households.

LESSON – Diversifying livelihood strategies

Some livelihoods may be easier to support than others. Livelihood interventions and training have generally been aimed at people who are already skilled, as they can be more readily engaged in rehabilitation programmes (IFRC, 2005). Such approaches may miss livelihood strategies of the landless, women, children or those with disabilities who may use altogether different livelihood strategies. In the case of Mozambique (Wiles et al 2005), agricultural livelihoods were supported by the provision of seeds and tools and the introduction of specialised crops; however, more complex livelihood strategies of urban households, semi-rural and fishing communities were not as well catered to, as many agencies did not have a logistical system that could cope with the needs of varied livelihoods. Similar findings arose from evaluation of the tsunami response.

¹¹ For school safety in Indonesia, see http://www.adpc.net/AUDMP/library/safer_cities/10.pdf and OECD guidelines at www.oecd.org/dataoecd/11/45/31968539.pdf. For school upgrading experience at the Aga Khan Development Network, see www.hyogo.uncrd.or.jp/publication/proceedings/2001workshop/6.%20symposium/6.3%20panel%202/6.3.1%20akes/akes.PDF.

Is there an opportunity to establish **improved livelihoods after the disaster**? Diversification of livelihoods reduces future risk, and recognises realities such as the increasing integration of rural communities and towns in some areas, where poor households may have members employed both as labourers or small farmers, and also in urban petty trade or construction. The rest of this section outlines strategies for livelihoods support in different contexts.

a) Employment and assets

Agriculture and livestock-rearing are among the main sources of income in the affected areas, followed by informal services. Poorer groups are likely to be the worst affected by loss of formal and informal employment, and employment/training schemes should focus on these groups. Options for women's employment outside the household may be limited. Whether to select cash- or food-for-work programmes should be carefully considered, according to who might participate (e.g. poor or non-poor groups, men or women), the local market, and the likely sustainability of public-works rehabilitation.

Loss of material assets is typical after major natural disasters, and this usually has a disproportionate effect on the poor because of their relatively greater dependence on such assets. Maintenance and sale of assets – for example, small plots of land, grain, jewellery, handlooms, livestock and agricultural tools – is a key livelihood strategy for the poor. MOA/FAO (2005) notes that for many rural and urban people in the affected areas in Pakistan, the buffalo is a form of 'bank', and people commonly own at least two buffalos, worth some Rs 50,000 each. Distress sales by the poor are typical after disasters, often determined by male heads of households, with sales often below market value in a buyer's market. **Once assets are gone, recovery for poorer groups is much more difficult. Asset replacement** may be important to support livelihoods, for example by replacing livestock (see below).

b) Cash and markets

Provision of cash, for example to support asset replacement, should be considered as part of a holistic recovery response. Harvey's synthesis (2005)¹² of existing documentation suggests that **cash- and voucher-based responses** during emergencies have been successful and are **perhaps more widely appropriate and feasible than has been assumed in the past**. Recipients spend the money sensibly, cash projects have not generally resulted in sustained price rises, and women have participated and have a say in how cash is spent. This is supported by findings after the Mozambique 2000 floods where organisations supported livelihoods through existing savings and credit programmes as well as cash-distribution schemes to spur the recovery of businesses and assets (Wiles et al, 2005).

OED (2005a) found that government cash grants were successful after the 1999 Turkey earthquake as they allowed affected people to purchase their own supplies and shelter, increasing their psychological well being and allowing them to **prioritise their own needs** for material support. In Gujarat after the 2001 earthquake, the need for cash assistance became apparent in an indirect way, as households were using the first instalment of house-construction funding to purchase food and other necessities, rather than for construction. Many households did not have the first phase of the house for receipt of a second instalment.

Local economies and trade may need to be revitalised. Local credit markets appear in some cases to have been damaged, e.g. local shopkeepers not offering credit.¹³ Relations in rural communities in South Asia often revolve around credit relations between the poorer and the better off, with interest often repaid through labour. Microfinance offers one means of ensuring that poorer groups have access to capital, and are not dependent on loans at exploitative rates of interest in a situation where there is limited access to credit.

¹² The 'Cash and vouchers in emergencies' paper is available at http://www.odi.org.uk/hpg/Cash_vouchers.html.

¹³ See the SCF assessment on livelihoods at http://earthquake05.un.org.pk/uploaddocuments/760SCUK_AJK_EarthquakeAssessment.pdf.

c) Agriculture and the natural resource base

Remaining near to or returning to agricultural land is a common strategy after disasters. **Targeted support to agriculture** can be helpful, particularly when, as is the case in Pakistan, the harvest and planting have been seriously disrupted. After Hurricane Mitch, DEC (2000, p 13) found: 'The provision of seeds, agricultural inputs and – in some cases – cash, helped farming families remain in their communities, despite massive harvest, soil, housing and livelihood losses. That so many agencies supported agricultural projects constitutes a remarkable and decisive step.' It should be noted that poorer groups who are landless might benefit from agricultural support only through increased labouring opportunities, and potentially lower prices of subsistence foods.

The distribution of seeds and tools can offer potential to support livelihoods if the following are included, as part of a wider livelihoods-based response:

- ♦ a careful needs assessment and dialogue with potential recipients;
- ♦ appropriate timing, to fit the agricultural cycle;
- ♦ seed varieties that are appropriate; and
- ♦ the provision of follow-up and necessary technical expertise.¹⁴

Use of the natural resource base accounts for 15–25 per cent of income for poorest households across South Asia, and the poorer the household the greater the dependence (Beck and Nesmith, 2001). Utilising the natural resource base is usually women's work – one reason why it is often ignored in needs assessments and recovery programming. MOA/FAO (2005, p 6) notes: 'People rely heavily on the forest to sustain their livelihoods, and there are over 30 species which provide people... with timber for construction, fuelwood, and for making tools and implements. In addition there are many non-wood forest products widely used for a wide range of purposes including animal fodder, animal litter, resins, and fruits and berries for human consumption.' Programmers should ensure that interventions recognise and **preserve access to the natural resource base by the poorest households, and in particular women.**

d) Livestock

The importance of livestock to livelihood strategies should not be underestimated, as has happened in previous recovery programmes, for example after the 2000 floods in Mozambique. In Pakistan MOA/FAO (2005, p 5) notes: 'The buffalo holds pride of place in the household, and is cared for with great attention... usually by womenfolk. In return the buffalo provides milk for domestic consumption and sale, calves, and ultimately meat.' **Restocking of animals may be a key recovery strategy.** House reconstruction will also need to take account of shelter for livestock so they can survive both the current winter and any future earthquakes (MOA/FAO, 2005). Transhumance, temporary migration with livestock to lower pastures during the winter, is common across the affected areas. Migrant pastoralists have reportedly lost significant parts of their flock (UN, 2005b). **Sophisticated customary systems of over-wintering flocks in farmers' fields on the plains** will have been disrupted, and care should be taken not to reinforce this disrupted state.

After natural disasters, management and sale of livestock such as chickens, ducks and goats are particularly important to the recovery strategies of poor women. A common livelihood strategy of poor women is to 'share-rear' livestock, that is to borrow a female from a better-off woman, rear it and return the first born and mother to the owner, keeping the second born. Agencies should ensure that they are aware of the importance of such systems to the poor and do not disrupt these.

¹⁴Three needs assessments (MOA/FAO, 2005; WB/ADB, 2005; WFP/UNICEF, 2005) found loss of stored seeds; however, this does not necessarily mean that seed markets are not functioning. For more on agricultural rehabilitation see http://www.odi.org.uk/hpg/papers/agricultural_rehabilitation.pdf.

e) Mutual support

Mutual support and sharing among the affected people will be key to their survival through the coming winter and for longer-term recovery. There are numerous examples of mutual support post-disaster, and agencies should attempt to build on this. Communities tend to band together immediately after major natural disasters, but as time progresses pre-existing patterns of inequality are reinstated. A WFP/UNICEF (2005) needs assessment notes that 25 per cent of households now rely on *zakat* (or obligatory alms), up from 5 per cent before the earthquake. However, the post-disaster period is also likely to see distress sales of land and assets from the poor to the better-off, which may include loans to be paid off with future labour, with wage rates often below the norm.

f) Migration and remittances

Migration by one or more household members to seek work is a common livelihood strategy which may become of greater importance after a natural disaster. MOA/FAO (2005) estimates that up to 40 per cent of the affected population may have migrated from some areas in Pakistan, although the actual extent and nature is not known. WB/ADB (2005) comments that due to labour migration, the proportion of women-headed households is fairly high – approximately 20 per cent of households in Pakistan-administered Kashmir. Implications of this for the recovery programme are:

- ♦ poorer households temporarily headed by women may become more vulnerable if migrating members cannot find work;
- ♦ migration raises protection issues related to trafficking, as affected people move away from familiar localities;
- ♦ migration is often seen as an economic benefit, but can be disruptive to longer-term household well being where, for example, one parent is absent for an extended period;
- ♦ remittances are likely to be important for promoting livelihoods, but not all households may receive remittances, and poorer groups may be left out.

■ POLICIES AND INSTITUTIONS

After major disasters, governments tend to introduce or update disaster policies, usually with donor support and under media pressure. Experience has shown that it can take up to ten years to bring a policy from concept to reality, partly because of the reluctance of government to commit itself to long-term disaster planning. While disaster policies include some details on vulnerability, they are mainly concerned with issues of national coordination and planning, and pay inadequate attention to supporting livelihoods and facilitating affected population participation.

LESSON – Recovery of institutions

Governments tend to create new ‘disaster institutions’ after major disasters, as a parallel exercise to development of policy – in the Pakistan case, the Earthquake Rehabilitation and Reconstruction Authority (ERRA), which aims to be the main interface with international lending institutions and other international organisations, as well as with national authorities.

Lessons from past disasters suggest that, given the multi-sectoral nature of recovery, new disaster-management institutions need to have the authority to coordinate reconstruction efforts by sectoral ministries and agencies (Gilbert and Kreimer, 1999). Experience has shown that disaster-management institutions may be bypassed by sectoral ministries, as happened in Bangladesh after the 1998 floods and in Mozambique after the 2000 floods (Beck, 2005, Wiles et al, 2005).

Government capacity is often problematic and may need to be strengthened and supported at national as well as **district and local levels**. Pre-existing **decentralisation** may also increase the challenge of working with a number of autonomous provincial or local administrations (FAO, 2004, www.fao.org/sd/dim_pe4/pe4_050201_en.htm).

Consideration should be given to how recovery policies weave into **existing development plans**. In this respect, time frames have often proven to be unrealistic; a World Bank planning document after the 2001 Gujarat earthquake notes: 'the regular, three-year-long duration of an emergency recovery loan... has consistently been found inadequate for implementation of sustainable institutional arrangements for long-term disaster management...' (World Bank, 2002, p 3).¹⁵

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¹⁵ The ERRA has been constituted for three years.

■ USEFUL WEBSITES

Pakistan context

- ◆ Pakistan Human Development Report – www.un.org.pk/nhdr
- ◆ Poverty Reduction Strategy Paper – <http://siteresources.worldbank.org/PAKISTANEXTN/Resources/PRSP.pdf>

Needs assessments

- ◆ United Nations – <http://earthquake05.un.org.pk/uploaddocuments/601main-small.pdf>
- ◆ World Bank/ADB – www.worldbank.org.pk/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/PAKISTANEXTN/0,,contentMDK:20715886~menuPK:293057~pagePK:1497618~piPK:217854~theSitePK:293052,00.html

Coordination

- ◆ HIC resources – <http://earthquake05.un.org.pk>
- ◆ IOM emergency shelter cluster – www.iom.int/en/news/pakistaneearthquake.shtml
- ◆ UNHCR camp management cluster – www.unhcr.ch/cgi-bin/texis/vtx/country?iso=pak

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