

# Post-Disaster Rehabilitation and the Coastal Poor

## Background

The poor in coastal areas of the western Bay of Bengal are particularly vulnerable to a wide array of disasters. These may be the result of political, social, economic or natural forces and the impacts may be acute or chronic, large-scale or small-scale. The following CLIP focuses on large-scale natural disasters and their interaction with the poor over the short to medium term - how they affect the poor, what is being done to address this issue, and what can be done specifically to help to rehabilitate the coastal poor after a disaster.

The complexity and dynamism of the interaction of land, sea and freshwater that occurs on the coast means that natural hazards occur frequently and take many different forms—tsunamis, tidal surges, coastal erosion, cyclones, floods and droughts all occur in the region. Coastal areas are also places where the poor congregate drawn by the accessibility for them of many of the natural resources

that are found there. When these hazards hit the coast they often turn into disasters that affect different people in different ways. The most prepared, enabled and empowered people are able to avoid, cope with, or adapt to these changes. The poor, however, are often unaware of the potential danger, or are unwilling, or unable to respond to it. They are often the ones who are hit the hardest during the disaster, are least able to make use of the support services that arrive and have the least resilience to the hostile situation they find themselves in.

However, from recent experience in disaster preparedness and response in the region, ways of specifically targeting of the poor in disaster preparedness, working with them through participatory processes to respond to disasters, and building up their capacity to help themselves rebuild their lives have been successfully demonstrated.

## Hazards and the coast

The coastal land-water interface is the point at which many hazards (such as cyclones, sea surges, tidal waves) first hit land. It is at this point that the energy of the weather or sea system is transferred into destructive energy on the land. It is at the coast where the severity is generally greatest and where such extreme hazards are more common. Flooding is often particularly severe in low-lying coastal areas as they are the point at which the flows from different water sources come together in sufficient quantities to cause major problems.

When hazards interact with human activity there is the potential for them to become disasters (Tobin and Montz, 1997). Globally it has been estimated that natural disasters killed 3 million and affected a further 800 million over a 20 year period (Noji, 1991). A disproportionate number of these deaths occur in the poorer nations of the world. South Asia is the region of the world

with the second highest frequency of natural disasters and number of deaths (after East Asia and the Pacific). Globally floods and cyclones are the most common natural disasters, with cyclones being responsible for most deaths. Within the coastal areas of South Asia these two forms of natural disaster are the most common and their effects can be catastrophic—one cyclone that struck the coast of Bangladesh in 1970 killed at least 300,000 people.

**“Globally natural disasters killed 3 million and affected a further 800 million over a 20 year period”**

One of the most damaging elements of natural disasters is their unpredictability. Whilst there are cyclone seasons in South Asia, this just means that the frequency of occurrence increases in those periods.

Other times of the year are not necessarily free from hazards. In the longer term, evidence suggests that the frequency of coastal hazards will increase with global warming and climate change (IPCC, 2001).

*The Sustainable Coastal Livelihoods (SCL) Project is implemented by IMM Ltd in the UK in partnership with ICM and FIRM in India. CLIPS are an output from the SCL project. They are designed to briefly inform policy-makers, planners and implementers about key issues concerning the livelihoods of poor people in coastal areas.*



## Coastal hazards and the poor

Whilst disasters befall people from all different backgrounds, they often hit the poor the hardest, affecting all aspects of their lives.

The **resources** available to the poor to construct a livelihood, or their access to those resources, are often severely disrupted, dissipated or even destroyed during a disaster. A direct measurement of impact on **human resources** is the number of people killed during a disaster, but these numbers are often only estimates and the poor are likely to be the least documented group. In many coastal areas the poor are *hidden* – they may occupy land to which they have no title and live in temporary housing in areas that are remote and hostile. Such is their anonymity that their loss is often not recorded and their very existence may be questioned when relatives request compensation. Death is only one indicator of the destructive impact of disasters. Those who survive are often left in poor health, injured, with little food, contaminated water and no medical supplies, and the loss of friends, families and possessions can leave them deeply scarred psychologically.

The poor are often highly dependent on **natural resources** for their livelihoods, including many common pool resources such as coastal land, fish resources, mangroves and freshwater supplies. The impact of disasters on these resources can be devastating; crops and livestock are

often destroyed resulting in the loss of savings and future food security. Saltwater inundation into coastal areas renders coastal land useless for agriculture for a considerable time. At these times, it is often the accessible near-shore resources (e.g. coral reef fisheries), which offer a critical safety net, providing a source of food or income.

Some of the **social resources** of the poor are often also broken down in a disaster. Leadership in the household or community can be lost through the death of key people. Patronage systems that provide protection, credit, information and access to political influence may be disrupted at the very time when they are most required. Poor communities are often isolated and have few resources so they are often highly dependent on each other. During disasters, these social assets become particularly important. Some coastal communities in South Asia, such as fishing communities or migrant groups, have little interaction with surrounding communities making them even more vulnerable in the post-disaster period.

The loss or destruction of **physical resources**, such as houses, roads, schools, hospitals, businesses, communications, water supply systems, and tools, affects the ability of people to survive in the short-term, but also to rebuild their livelihoods in the longer-term. The **financial resources** of the poor, which are often

kept with them in the form of cash, jewellery or livestock, may also be lost in a disaster. The poor are also unlikely to have taken out any form of insurance for their losses, leaving them even more exposed during disasters. For some, disasters can represent the final crisis that pushes them into extreme poverty.

A diversity of **direct influencing factors**, such as government policies, service delivery, laws, non-governmental support agencies, religion, culture, society or the market, which affect the poor - their access to resources and interaction with those factors, will also be disrupted following a disaster. Support services, markets and job opportunities will be in disarray and when emergency services start to function their effectiveness at reaching the most vulnerable may be limited.

Other **indirect factors** beyond the control of the poor, will also influence the impact of a disaster. Secondary hazards, in addition to the primary hazard, e.g. disease outbreaks following a cyclone, are common. The timing of disasters in relation to agricultural seasons also has a major impact on the poor affecting labour demand and food supply. Background changes and trends in the coast, such as population density or the condition of coastal forests and mangroves that can break the force of tidal surges or storms, also play a role in determining the effect of a disaster.

## The capacity of the poor to respond

In coastal areas around the Bay of Bengal, the poor are extremely vulnerable to disasters and, as described above, they are hit hard by disasters when they arrive. Everyday conditions for the coastal poor may already make them extremely vulnerable (Winchester, 1992). But disasters can play an important role in determining the difference between bare survival and complete destitution.

Adjustments to shocks is broadly determined by the resources available to people before a disaster and the extent to which they can call on: 1) other members of their household, 2) friends, relations and caste fellows, 3) village society, 4) the state, and 5) the market (Winchester, 1992). Large families provide a way of maximising benefit flows from the re-

sources available and provide a safety net after disasters by spreading risk. Collaborative action with friends, relations, fellow caste-members and the rest of the community may often be the only course of action available to the poor to deal with the post-disaster situation, but even this coping strategy may constitute a risk for some.

Beyond the immediate community, the wealthier members of society may be able to access formal support mechanisms and start to rebuild their lives whereas the poor are often isolated from those services and may have only their skills, wits and ca-

capacity for hard work to fall back on.

In the longer term the poor may seek to avoid being exposed to hazards, minimise the impact of hazards, increase family size, build up assets, diversify their production strategies, and income generating

options or enhance social support networks (Blaikie *et al.*, 1994).

For the poor, an extreme response to vulnerability to disasters is that of migration. Waves of people have left the East Coast

of India in recent years to seek safer livelihoods in less disaster-prone areas such as the Andaman and Nicobar Islands or urban centres.

**“The poor are extremely vulnerable to disasters and they are hit hard by disasters when they arrive”**

## Current responses

Interventions can be thought of as existing across four phases: preparation; relief; rehabilitation; and development. A key element of the success of post-disaster interventions depends on the degree and effectiveness of preparation in advance of the hazard arising.

### Government responses

For governments disaster interventions represent a difficult balance between the expenditure of scarce resources and the likelihood of a hazard arising. The uncertainty of when, where and in what form natural hazards are going to arise makes preparation difficult. India has long had disaster management codes which are designed to guide the administration in relieving suffering and restoring the economy in stricken areas (Winchester, 1992). The effectiveness of any preparatory planning is extremely dependent on how those plans are put into action and this can often be very weak.

A key element of any response to a natural disaster is the mobilisation of the armed forces. They often play a vital role in clearing roads, establishing communications and distributing medical supplies. But the civil administration remains a mainstay of the support during the relief and rehabilitation phase, and is responsible for providing much of the relief aid; for getting services and communications operational, and for providing compensation. Unfortunately, after initial relief has been provided and the disaster's profile begins to fade, the process of rehabilitation often becomes less focused and the priorities tend to

shift towards re-establishing infrastructure and service delivery systems that create renewed growth opportunities.

### International and civil society responses

The international community is also quick to support people after a disaster with bilateral and multilateral donors and the international NGOs providing emergency funds and often mobilizing formidable resources to support disaster victims.

Wider civil society also plays an important role in disasters by giving gifts, money and their time as volunteers. Amateur radio operators have frequently played an important part in rebuilding communication linkages immediately after a disaster. In India, many national NGOs establish offices locally and work in partnership with local NGOs to help implement support projects after disasters. If NGOs have been operating in an area for some time, they often have a good working relationship with local communities and can respond quickly to a wide diversity of needs. This complements the larger scale and more sector focused approach that often characterises government support.

### Key problems

The combination of these different forms of support can provide a compre-

hensive set of instruments to deal with a disaster. However, in spite of the many years of formally responding to coastal disasters, the responses are often still well below expectations.

Part of the problem is that disasters are periodic and unpredictable. This means that planning for them can be costly and the plans may not be used for many years, affecting the efficiency with which they are implemented when a disaster does strike. This in part is why the response to many disasters starts with a period of chaos before the partners settle into a pattern of coordination and collaboration.

When it comes to rehabilitation the situation is a little different. It is at this stage

that the degree of differentiation of support for different groups of affected people is essential if those different groups are going to be helped back towards viable and sustainable livelihoods. However, relief support tends to be less concerned with these differences and the opportunities that are created are not always available to everyone in the same way. The poor are often the least able to take up new development options and may even become worse off because of them. The poor represent a diverse group with a range of needs and aspirations covering many different sectors. Unless this complex diversity is recognized and the poor are targeted in rehabilitation efforts, there is the risk that the poor will end up worse off than they were before the disaster.

When it comes to rehabilitation the situation is a little different. It is at this stage that the degree of differentiation of support for different groups of affected people is essential if those different groups are going to be helped back towards viable and sustainable livelihoods. However, relief support tends to be less concerned with these differences and the opportunities that are created are not always available to everyone in the same way. The poor are often the least able to take up new development options and may even become worse off because of them. The poor represent a diverse group with a range of needs and aspirations covering many different sectors. Unless this complex diversity is recognized and the poor are targeted in rehabilitation efforts, there is the risk that the poor will end up worse off than they were before the disaster.

## Key guidance

The following guidance draws from a DFID-funded review of the experiences of government and NGO agencies in responding to the 1999 Orissa cyclone (see IMM, 2001). Guided by the *Sustainable Livelihoods Approach (SLA)*, the response process was targeted at the poor and worked in parallel, and complementary to, other development efforts in the area.

### Disaster preparedness

A key lesson from the Orissa cyclone was the importance of good disaster preparedness. A critical component of this is baseline vulnerability and capacity information to help understand and

target the diversity of vulnerable people in the coast, many of whom may be *hidden* in what may appear to be wealthy and less vulnerable areas. Such information will assist in adjusting efforts to match the varying capacities of different people to respond. For example; the *supply of good and timely information about potential hazards* needs to be tailored to the diverse needs and capacities of the intended audience. The poor, particularly women, who do not have access to good information services, are severely disadvantaged.

Understanding a disaster within the wider vulnerability context is also a

critical aspect of planning a response. The *seasonal changes and trends* that regularly affect people's lives can conspire to worsen the impacts of a disaster upon the poor, e.g. a drought following a cyclone can seriously undermine rehabilitation efforts.

Establishing *relief and rehabilitation response mechanisms at all levels* from the community to the government and through donor and relief agencies, before rather than after a disaster is also important. This should have the built-in capacity to accommodate common hazards and those that do not occur very often.

## Key guidance (continued)

### Co-ordinated responses

In the immediate aftermath of a cyclone, the **rapid establishment of coordination mechanisms** is essential if efficient, effective and well-planned relief is to be provided. The situation immediately after a hazard has passed **is not necessarily the disaster's lowest point** and unless a rapid and effective response occurs, conditions, particularly with regards to health, may deteriorate further. This includes attending to the less affected areas, which may be left out in the enthusiasm to get to the worst affected areas but which still need support. Close collaboration between support agencies is also critical to ensure the response is well co-ordinated and efforts are not duplicated. Recruiting and **training local volunteers** from the villages can make maximum use of local knowledge and provide a vital link between support agencies and local communities.

### Targeted responses

Targeting during relief is important and, in spite of the urgency, it is possible to achieve. Following a disaster, using **local knowledge to identify the poor** can be a rapid and effective way of improv-

ing targeting. **Participatory planning** of interventions, using the **skills and capacities of the local people**, can ensure that they contribute meaningfully to the rehabilitation process and sustain gains made into the future. **Food and cash-for-work can be very useful for specifically targeting the poorest groups**. However other interventions may be needed for those unable to participate in such measures, such as the old, the sick, very young and the disabled.

### Sequencing of interventions

The sequencing of interventions to match the realities of local agricultural planting and harvesting activities, and the realities of local markets for labour and goods, is crucial. This must consider the specific needs of vulnerable groups, especially women, children, the old and the ill, and the varying impacts of rehabilitation on different components of people's livelihoods. For example, compared to other coastal activities such as agriculture, fisheries can often be restored relatively quickly in the wake of a cyclone, contributing significantly to restoring local food security.

### Integrating relief, rehabilitation and development

Relief, rehabilitation and development are often thought of as distinct phases but they need to be thought of as all part of a continuing process and made to complement each other as much as possible. Rehabilitation is an important bridge between relief and development, but it must be seamlessly linked into the other two if sustainable benefits are to be achieved. As well as restoring people to the conditions existing before the disaster, well-planned rehabilitation measures can also create new opportunities and the momentum to go beyond this state and improve on past conditions. These new opportunities should recognize and **build on positive strengths of existing structures and processes** and take into careful consideration the viability and sustainability of new alternatives.

A disaster teaches many lessons, often these are obvious and simple but they may be quickly forgotten. **These lessons must be acted upon** if they are to reduce vulnerability in the future.

## Key documents & websites

### General

Blaikie P, Cannon T, Davis I and Wisner B (1994). *At Risk: Natural Hazards, People's Vulnerability, and Disasters*. Routledge, London, UK

IPCC (2001) *Summary for policymakers. Climate change 2001: impacts, adaptation and vulnerability*. A report of Working Group II of the Intergovernmental Panel on Climate Change (17).

Noji E K (1991). *Natural Disasters*. Disaster Management: 7(2).

Tobin G A and Montz B E (1997). *Natural Disasters: Explanation and Integration*. The Guilford Press, New York, USA.

### Sustainable Livelihoods Approaches

DFID's SLA website:  
[www.livelihoods.org](http://www.livelihoods.org)

UNDP's SLA website:  
[www.undp.org/sl/](http://www.undp.org/sl/)

FAO livelihoods website:  
[www.fao.org/sd/](http://www.fao.org/sd/)

### Disaster management experience

ActionAid India & NIMHANS (2000). *Psychosocial Care for Individuals: Supercyclone*. Information Manual 1. Books for Change, Bangalore, India.

IMM (2001). *Learning Lessons from the Cyclone: A Study of DFID's Support for Post-Cyclone Livelihoods Rehabilitation in Orissa, India*. Report prepared for DFID Delhi by IMM Ltd, Exeter, UK.

Reddy A V S, Sharma V K and Chitoor M (2000). *Cyclones in Andhra Pradesh: A Multidisciplinary Study to Profile Cyclone Response in Coastal Andhra Pradesh, India*. Produced for Oxfam, Hivos and ECHO. SRAS Publications, Hyderabad, India.

Winchester P (1992). *Power, Choice and Vulnerability: A Case Study in Disaster Management in South India*. James & James Science Publishers Ltd, London, UK.



IMM Ltd

To discover more CLIPS  
or expanded SCL Working Papers on  
the same theme contact:

#### IMM Ltd

Innovation Centre  
University of Exeter Campus  
Exeter EX4 4RN  
United Kingdom

Phone: +44 1392 434143

Fax: +44 1392 433645

Email: [J.Campbell-IMM@ex.ac.uk](mailto:J.Campbell-IMM@ex.ac.uk)

Or visit our website at:

<http://www.ex.ac.uk/imm>

To contact SCL partner  
organisations:

#### ICM

64-16-3A Pratap Nagar, Kakinada,  
Andhra Pradesh, INDIA  
Phone: +91 (0)884 236 4851  
Fax: +91 (0)884 235 4932  
Email: [icm\\_kkd@satyam.net.in](mailto:icm_kkd@satyam.net.in) or  
[rmy\\_sujata@sancharnet.in](mailto:rmy_sujata@sancharnet.in)

#### FIRM

Main Road, Kothapalli, U.Kothapalli  
Mandal, East Godavari District,  
Andhra Pradesh, INDIA

CLIP Images from IMM Ltd