Knowledge, Power and Need in Disasters

Building response on indigenous knowledge

It may have been possible at some point in the past to distinguish between the immediacy of a disaster and the pervasive conditions of ill-health, poverty, unimproved water sources and housing of those people who are most vulnerable to disasters. Indeed, during the 1960s and 1970s it was felt that steady improvements in social and economic conditions were actually reducing vulnerability.

But for at least 15 years the distinctions between the daily crisis of survival and occasional disasters have become increasingly blurred for hundreds of millions of people. These people live primarily in the no-longer-developing countries of the South.

Wars, natural disasters and developmental disasters also affect significant numbers of people in the North. However, this part of the World Disasters Report 1994 will focus on the popular responses to disasters in the South. Disasters are more pervasive in the South, the unequal relations between North and South are contributing factors to those disasters, and groups in the South have been the most critical and vocal in identifying the problems and offering viable alternatives.

People across the South have long lived with the threat and reality of natural disasters, and have developed means to prevent and mitigate their impact. Their knowledge of the environment is intimate and they are best placed to warn of disaster-inducing changes in the environment. Social and political relations exist to respond to crises as they develop.

Households and communities have adapted a variety of subtle but successful coping mechanisms to deal with difficult conditions.

Development disasters

Many indicators illustrate the expanding crises of poverty and vulnerability. More than one billion people in the South are chronically hungry; another 400 million are vulnerable to hunger during their lives. It is getting worse: altogether, there has been a 30% increase on the number of people who were hungry in the early 1970s. UNICEF's report, Adjustment With a Human Face, showed that malnutrition among children and women, once thought to be falling, increased during the 1980s.

Hunger and disease are intimately linked to the economic conditions confronting low-income peoples. More than one billion people worldwide live in material poverty, and wealth disparities have widened during the past 20 years; UNDP's 1991 World Development Report calculated that some 20% of the world's population today control nearly 85% of its wealth.

Rather than wealth flowing from North to South - as orthodox development economic theory suggests - the South is an unequal partner in the exchange of resources, assets and money. The value of Southern food and mineral exports to the North has declined by a third or more over the past 15 years against the value of manufactured goods exported to the South. As others have argued, it is not the rich who feed the poor, but just

the opposite Development assistance, food aid and emergency relief in no way off-set the structural poverty and deprivation in the South.

Over the past decade, the facade of North-South economic harmony and improvement has been shed, and the conditions that increase vulnerability are now evident. As researchers from Mexico's National Institute of Public Health have pointed out: "The most evident impact in Mexico of the economic crisis has been 'epidemiological polarisation', an intensification of the disparities in health status within the population As a result of this polarisation, already under-financed health care services must now treat increasing numbers of infants and children who are suffering from malnutrition and infectious disease."

Tuberculous and other diseases once considered in decline have shown a resurgence in the wake of rising poverty. In turn, ill-health is having direct economic costs which further contribute to poverty. WHO evaluators estimated that - apart from the many lives lost - Peru's 1991 cholera epidemic cost it about $1 billion in lost production, exports and tourism As governments struggle to sustain control over national economic resources and planning - against strong pressure from international lenders to relinquish such control - social service spending has been cut and little new investment has occurred.

So pervasive has been the disinvestment in social services, the fall in real wages in both the formal and informal sectors of national economies, and the stress on women and children to augment household incomes and fulfil expected domestic tasks, that people speak of the

Poverty in the developing world

Region	Number of people below the poverty line (in millions)	Percentage of the population in poverty
South Asia & East Asia	805	31
Latin America & Caribbean	75	19
Middle East & developing Europe	60	31
Sub-Saharan Africa	180	47

South Asia & East Asia

Latin America & Caribbean

Middle East & developing Europe

Sub-Saharan Africa

Number of people below the poverty line
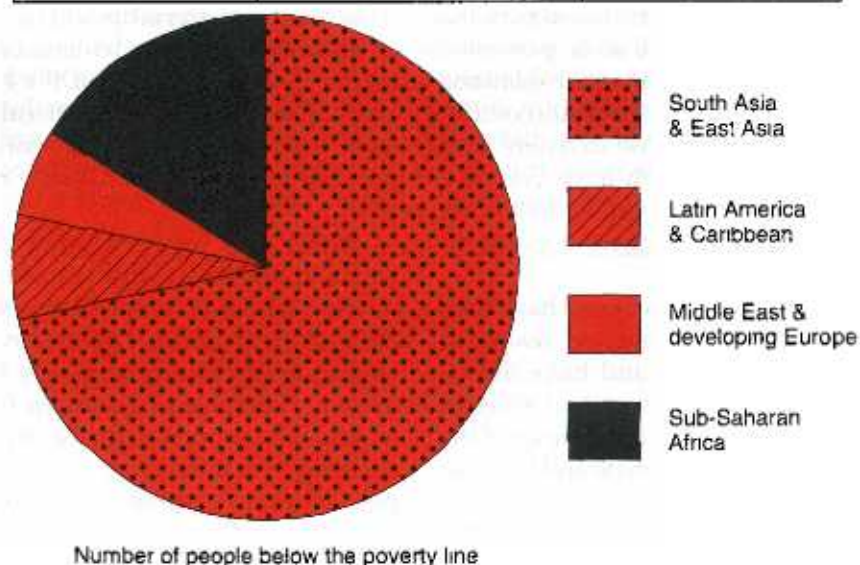
Despite some significant improvement in health, welfare and incomes, one-fifth of the world still lives below the poverty line. 21,100 million people cannot afford a minimum nutritionally - adequate diet and other essential non-food items

Source: World Bank, figures for 1990.

1980s as the "lost decade". Unfortunately, the lost decade continues into the 1990s.

Disaster causality

It is hardly surprising that the intensity and frequency of disasters are rising. Shadowing global inequalities, national disparities between socio-economic groups have dramatically grown. The wealthiest 20% of Chile's population expanded control of national income from 51% to 61% between 1978 to 1985. Over the same period, the income share of the poorest 40% of the population dropped from 15% to 10%.

Differentiation also occurred in access to social services. Cuts in government support for health, education and other social services were not uniformly felt. The World Bank reported that in Bangladesh, for example, lower income groups were further marginalised in their access to health and family-planning programmes, while in Ghana, non-urban (and thus less wealthy) regions had the greatest fall-off in health unit attendance, as people found clinics unable to meet their health needs. Many primary health care initiatives have stalled as health ministries cut already inadequate budgets.

Such disparities are the outcome of policies designed, according to its proponents, to stimulate economic growth. These trends coincide with what one writer noted as a "glaring absence of concern for various human costs of development". The growth that has occurred has been largely captured by those who already command most economic and political resources, and the comparative wealth of the industrial countries has widened against that of most of the South, while the comparative wealth within many countries continues to widen.

It is against this background of impoverishment and vulnerability that local communities face the external world. Natural disasters are but one of the many emergencies people may experience. Combinations of persistent poverty, hunger, illness, inadequate housing, harassment and re-pression by authorities are the conditions of daily life for far too many people. Each of these contribute to a larger misery, and an emergency, such as a flood or earthquake, may merely be an "add-on". Low-income people have one freedom of choice: to choose between different disasters.

Listening to local people

Disasters may expose to outsiders - such as relief agencies or, through the media, the public - the vulnerabilities of impoverished communities, but those communities and groups working with them already know their vulnerability well. Combined with the technology and infrastructure of development and disaster-response agencies, this knowledge is an immediate and cost-effective medium for change.

But will the outsiders listen and learn? Explaining some of the constraints facing the Organisation of Rural Associations for Progress, a million-strong grassroots Zimbabwean NGO, its director noted that external donors often favourably cited its small-scale approach. Funding reflected donor collaboration with ORAP's decisions, but donors had a false expectation that ORAP's peasant farmers and other low-income people can solve structural problems with minimal resources. She argued that ORAP's members had much to teach Northern donors about survival and the limits of externally-driven approaches to disaster mitigation and long-term development. Donors should use that knowledge to press for change in their own countries.

ORAP's relations with international collaborating organisations are similar to that of thousands of other NGOs and community-based organisations, reflecting many of the contradictions confronting locally-based groups as they struggle with the content and process of development. During disasters, these contradictions intensify and become more visible: not simply the differences in material wealth, but the differences in assessing both the underlying causes of a disaster and practical ways to restore security and stability.

In simple terms, local communities have a wealth of skills, knowledge and resources not only to deal with disasters but to reduce their own vulnerability to disasters, something too infrequently understood or applied by either relief or development agencies. Two elements can help to move disaster mitigation and response beyond the rhetoric of collaboration.

The first considers the context of disasters by drawing on comparative experiences from what some dub "disaster inducement", more frequently known as development. The second is to demonstrate that indigenous processes are viable and applicable, not only to disaster mitigation and response, but also to diminishing the causes of disasters. Similar discussions are occurring among many grassroots NGOs around issues of development, empowerment and sustainability. There now exists a body of knowledge that international agencies can seek out in order to improve dramatically their policies and operations.

Coping with crises

The coping mechanisms and survival strategies of low-income people demonstrate that the range and depth of acquired social knowledge available to deal with emerging disasters is impressive. Coping strategies can include: changes in foods consumed and frequency of eating; sale of animals; increased sharing between households; sale of tools and male migration for work or household movements to obtain relief supplies. Household survival and community integrity are the objectives of coping strategies.

The focus on coping strategies has illuminated for external groups some of the internal indicators of disasters, such as levels of livestock sales. Development agencies are using these indicators to monitor household and community stress and as predictive tools in disaster mitigation and timely response. However, there is a tendency among donors to focus too heavily on the indicators rather than the underlying socio-economic stresses that prompt survival strate-

gies. The rationale is that people's coping strategies are self-protective mechanisms and can be counted on to protect them in disasters.

It is inappropriate to expect such coping mechanisms to sustain vulnerable groups for long periods of time given the increasing intensity and duration of recent economic and development disasters. The assumption that coping strategies mitigate the effects of disasters must be re-examined in the light of the changing structural causes of disasters, especially since today's worsening poverty and vulnerability undermines the social knowledge of coping acquired over decades and centuries.

Interest in coping mechanisms is only one example of the increasing attention being given to the knowledge base of low-income and disaster-prone communities. The ability to survive under even the most compelling circumstances reflects a diversity of resilient practical skills and social relationships. Rather than disintegrating amid disaster, people seek to restore social and cultural order, even at the risk of death.

For example, in Western Sudan, hunger, destitution and death are a part of a social continuum. In his book, Famine That Kills, Alex De Waal explains: "'Hunger' is something that one simply puts up with. Satisfying the pangs of hunger is not a major concern for famine-stricken families. Even during the worst of the famine, households spent only a fraction of their potential income on food. Their priority was instead to preserve their way of life, to avoid destitution." To lose their way of life is, for the people of Darfur, a fate worse than death, an attitude that international disaster-relief agencies may find incomprehensible, but must understand if they are to help to halt the upward trend of disasters.

People most affected by environmental change and related disasters have led protests against the abuse of natural resources for commercial purposes. They have offered alternatives which reflect their needs and resources rather than the luxury wants of outsiders. For example, India's Chipko movement has protested at

the commercial exploitation of forests by literally hugging the trees which the timber industry seeks to cut. Women play a major role in Chipko, especially in showing the economic value of forests and woodlands in their lives. Reafforestation and local political organising have become features of the movement, assuring that the forests serve local interests first.

The realisation that their own knowledge and analysis can be effectively and legitimately applied to problems has frequently become the basis of community mobilisation. Declining real wages, falling prices for basic food crops, and cuts in social services have forced at least one-third of Mexico's rural women into wage employment. Yet low wages sustain their poverty. Over the past two decades, Mexican peasant organisations, often managed and controlled by women, have emerged to address the issues affecting their lives and looking to restore lost conditions for subsistence and communal production. These experiences increase the confidence of women to move into other decision-making groups to press for other rights.

Social mobilisation of vulnerable people is occurring across the world. Women living on the streets of India have formed organisations to counter harassment and legal restrictions collectively. Self-employed women in Gujerat, India, formed a trade union in 1972 to raise the status of their work and press for better wages and working conditions. As the Self-Employed Women's Network has grown, it has expanded into organising low interest credit and cooperatives for vendors and craftswomen.

This wealth of knowledge, critical analysis of situations, and organisational experience is not lost during crises, but often invigorated. Community groups were the first to respond following the September 1985 earthquake in Mexico City. Slow governmental response and its focus on restoring formal businesses, became the impetus for women seamstresses to organise a union to pursue their needs, restoring lost equipment, supplies and work sites, and then to press for better wages and work conditions.

The social mobilisation of labour is common in many societies, especially during crises. Women's work groups exist across Africa, and some have been formalised in recent years with external programme support, as in Kenya's Green Movement, which has build upon women's agricultural and environmental knowledge to promote tree planting, income generation and community development. In Zimbabwe, a prominent NGO evolved after independence from informal women's clubs into a dynamic grassroots-directed organisation that builds upon community needs, skills and resources to promote food security, marketing, education and overall rural development.

More complex labour sharing is seen in cooperatives. In the years after independence, women spontaneously began the Green Zones around Maputo in Mozambique as suburban vegetable gardens to grow supplemental food The idea expanded as more women joined in and organised to use their labour more effectively. Collective buying of inputs and marketing followed. The government responded to the success of the Green Zones by channelling credit to cooperatives and promoting the concept for other cities and towns. In less than a decade, the Green Zone concept jumped from an informal food production system to a major component of national policy on food security.

Discussing indigenous knowledge and organisation, questions can be raised about recent disaster responses in Ethiopia and Eritrea. For example, how might the international community have responded to recent famine disasters if more attention had been given to the insights of Eritrean and Tigrean indigenous relief organisations? And how different might the plight of vulnerable people have been if international organisations had recognised that famine was primarily a result of the Ethiopian government's military strategy?

For almost a decade, indigenous relief organisations pointed to the war being waged by the Ethiopian government as the cause of population movements and famine. Specifically, they called attention to the attacks on

markets by the Ethiopian military as a crucial factor precipitating the 1983-84 famine and the flight of refugees to Sudan.

War was occasionally acknowledged by the international relief community, but usually as a hinderance to distribution rather than a cause of hunger. As De Waal showed in his book "Evil Days", few relief observers recognised what was obvious to people in northern Ethiopia: the intentional disruption of food distribution through the indigenous trade and marketing networks had a direct impact on the famine of 1983-84. Without this knowledge, the international community came close to being a part of the disaster perpetrated by the then Ethiopian government.

The knowledge of functional social and economic systems arrives with refugees. Hardly helpless, "in their escape, refugees have already demonstrated considerable ability to adapt to change". That adaption is best applied where refugees have the flexibility to engage in reconstructing their lives and social systems. Refugees able to settle with local hosts - often their preference - adapt more quickly than do refugees settled in camps who may have to deal with new processes, in addition to recovering from the trauma of flight.

Within settlements, new norms of behaviour are expected of refugees, leaders may be ignored or replaced by settlement officials, and social relations are compartmentalised in new ways. Yet, Barbara Harrell-Bond's detailed study of Ugandan refugees in southern Sudan, "Imposing Aid", indicates the relief and reconstruction abilities which refugees offer. Refugees brought a diversity of technical and organisational skills, a determination to re-establish a social order that sustains their culture, and a desire to become economically self-reliant. The perceptions of relief agents often undermine refugee initiatives, although outsiders may provide a portion of the framework within which reconstruction may occur.

Local knowledge and aid

While it is too early to sort through the issues of Somalia in the early 1990s in any detail, it is possible to note aspects of the disaster relating to indigenous knowledge and relationships (see Section One, Focus 4; Section Two, Part VII; and Section Two, Focus 6). The approach adopted by the UN Special Representative, Muhammad Sahnoun, during his brief tenure in 1992, was to understand the dynamics of Somali disasters. According to Middle East Report: "He got around, dealt with a broad spectrum of Somalis directly... He met with elders, with women's associations, with tradesmen and professionals and intellectuals. The gist of his plan was more of a bottom-up approach, regional conferencing leading to a major national conference."

Asked why he consulted women's associations, Sahnoun said: "Women have been instrumental in pushing reconciliations. They are deeply involved. They need to be, for survival. Women also have an instrumental role in the economy. They are at the core of many village and town markets." He continued: "Traders and businessmen are extremely adept at making good deals - whether it's for drugs, food or weapons. They find ways in and out of the country. There are probably more flights bringing qat into the country than there are bringing food. How do we use that knowledge to move things that are needed? I don't think there's been a serious effort to get such people to take responsibility for delivering food..."

On elders and Somali clan structures, he said: "If you approach the elder system under Western assumptions of representative democracy, you're likely to fail. You have to operate on the Somali notion of participatory democracy. In terms of interclan reconciliation, the elder process operates as an assembly. Things are worked out in groups." Gaining an understanding of the multiple layers of society takes time, something actually in good supply during the onset of slow-developing disasters. Within a shadow of mounting stress, disaster response and development agencies have time to work with communities to understand the internal dynamics of the societies involved and to mitigate

Local knowledge and community organisation can be powerful tools in preventing disasters, combating their effects or speeding up recovery from crisis. In many countries it is the creation of self-help groups - whether for skills training, production, marketing or pressing legal claims - which often show the way with innovative approaches to welfare provision, capacity building and empowerment of local communities
Bangladesh, 1989 Chris Steele-Perkins/Magnum

the harshest impacts of a disaster

The civil and food-security disasters in Somalia were of long duration in the making; Somalia's crises had existed for many years, fluctuating in intensity. Thus, Sahnoun's approach to understanding the social and economic elements of contemporary Somalia would appear to have been realistic, not only in dealing with a major disaster but also to contributing to its resolution. The question remains, would Sahnoun's method of building on indigenous systems have led to a different and better resolution of conflict and hunger than the military intervention?

Financial assistance for a donor's own political ends, but given in the guise of development, has too frequently contributed to the chronic disasters of poverty, ill-health and exploitation. Take US aid to El Salvador. Over US$3 billion was provided to the Salvadorean government in the 1980s, ostensibly to support imports and subsidise social services, which the then government had seriously neglected. The political motive was to support government military action against insurgent forces. The US subsidies reduced the rate of decline of the Salvadorean economy, but did little to reverse the fall - by nearly one-third - in real income during the 1980s. Provision of aid did not contribute to national stability or popular well-being.

These examples indicate the stress facing donor agencies and governments, just as the excessive sale of animals indicates stress in local communities. The parallel is of value in re-examining the advantages which groups - communities, NGOs, governments, disaster-response and development agencies - can bring to disaster prevention and sustainable development.

People's wisdom

It has become commonplace for governments and international donors to support the work of NGOs. NGOs are credited with having a more intimate understanding of local peoples and conditions than governmental and international agencies.

Some NGOs work closely with community-based organisations and have the opportunity to not only act as buffers between communities and inappropriate development interventions but to give voice to communities' concerns.

The heightened disasters of poverty in the 1980s found many NGOs becoming the favoured means to provide compensatory assistance to people devastated by rapidly-contracting economies and cuts in social services and food subsidies. In certain instances, such as delivery of famine relief supplies into Ethiopia and Eritrea via Sudan in the 1980s, international and indigenous NGOs were designated by US and European donor agencies as the only means to accomplish the task effectively. In other cases, NGOs have taken the lead in responding to the crisis of AIDS by offering care and treatment and initiating prevention programmes.

NGOs have been an important component in dispelling the myth that guided development planning for 30 years: that the assumed "ignorance" of the poor excluded them from involvement in local and national development decision-making. For example, in public health the Bangladesh Rural Advancement Committee assumed the role of informing parents of the causes of dehydration in children and demonstrated a simple home remedy. The campaign's effectiveness was seen in the aftermath of the 1991 cyclone that hit Bangladesh, when diarrhoea rates among young children in the devastated area were no higher than expected.

Also in Bangladesh, the experience of the Grameen Bank has demonstrated the effectiveness of providing small loans to groups of low-income women. Increased economic security reduces vulnerability to occasional natural disasters and the daily disaster of poverty and exploitation. In an interesting pilot effort in Peru, low-income residents vulnerable to annual floods and mudslides organised to apply their local knowledge of the environment, social relations and needs to preparing flood control works. Communities worked with an NGO which hoped to generalise from the

experience to influence national policies. Initial mitigation effects were positive, but the external socio-political powers did not support local efforts.

A significant outcome of the Peruvian experience - and seen elsewhere - was the community's realisation that the technical and legal tools considered the domain of "experts" could be learned and adapted to address the "experts" in their own language and on their own terms. Similar learning has been used by communities in the Appalachian region of the United States to expose industrial disasters causes by toxic waste dumping and land and water pollution.

These and numerous other examples demonstrate the capacity of communities to assume some responsibility for disaster mitigation. To outsiders, the processes for mobilising community and NGO involvement may appear slow, but without their involvement sustainable disaster mitigation is problematic.

As in any organised process to achieve specific ends, community-based disaster mitigation enhances community confidence and power. From having been perceived (and perhaps perceiving themselves) as "victims," people become skilled agents of change - perhaps a cause for new vulnerability from interests threatened by popular mobilisation and change. As confidence and experience grow, so too does organisational experience and efficiency. In response to growing NGO responsibilities over the past two decades, some are insisting upon being involved in the design of economic reform programmes and development projects, especially those involving funds from international donors. This provides an opportunity to contribute to policies and programmes which cut the trend of growing poverty and the risks of new disasters.

The role of NGOs

Increasing poverty and deprivation, and sustained failure of top-down economic growth, are major ingredients both in the growth of disasters and the emergence of NGOs and CBOs on an influential scale. NGO roles vary: service delivery where public or private institutions can or will not do so; organising with and for community groups; advocacy for policy changes; and networking

Service delivery is likely to remain the largest role played by international and indigenous NGOs. Much Northern disaster relief is channelled through (mostly Northern) NGOs. For example, after 1985, US food aid to Ethiopia was channelled exclusively through NGOs, most of which were large US charities

In some cases, NGOs involved with disaster response have played a key role in informing their home constituents by analysing causes of famines, wars directed at civilians, and vulnerability of low-income people to floods and industrial disasters. These NGOs form an important link to communities which have learned from bitter experience that the economic growth model of mainstream development carries heavy costs for people in poverty.

Among Southern organising and advocacy NGOs, creative initiatives have occurred to integrate the knowledge of poor people with a structural analysis of poverty. The analysis goes beyond basic critiques of unjust and destructive systems to set out new approaches to development, encompassing alternative concepts and programmes of economic, political, cultural and social relations.

For example, one in 10 people in the Philippines belongs to NGOs or CBOs, important not only for ensuring a sound and vocal civil society, but also for their circular informing and learning through networks and umbrella organisations. Sustainable development concepts are tested daily by millions of people. Philippine NGOs expect international counterparts to use their knowledge and resources to address problems that come from the North but impact on the South.

Issues which Northern NGOs are expected to address are complex: unsustainable extraction of raw materials from the South, use of financial power to coerce Southern com-