

## **Part Four: The Role of the United Nations**

### **P. The Role of UNDP and UNDRO Before, During, and After the Disaster**

Before the disaster, relevant policy emphasis within the UN system had focused on three areas:

First, activities to help national counterparts, with information, training, and technical support for specific local initiatives in disaster preparedness and mitigation.

Second, a review of sources of outside capital and technical assistance which could be brought to bear on mitigation projects, and post-disaster recovery.

Third, reviews and monitoring of UN country programmes to identify mitigation opportunities, and to highlight potential disaster risks associated with existing and planned development projects.

It was recognised early that activities had to extend well beyond the government arena. UNDP staff in Salacca had put special emphasis on identifying influential individuals within a range of national institutions, who had already shown an interest in disaster preparedness and mitigation. These people were drawn from NGOs, banking, finance, insurance, and private industry. The long term aim was to encourage the emergence of a constituency which would reflect concerns within these institutions, and which could collaborate in shaping national policies. Building and maintaining formal and informal networks was a prime concern at this stage. Representatives of these organizations had been co-opted as advisers to a number of small task forces drawn from government, the national university, and the UN system which began to inventory existing information on national hazards, the impact of previous disasters, and the specific skills and interests of people within national institutions. At the same time, UNDP and UNDRO began a pilot project jointly with the insurance industry association and a number of university departments, with a number of objectives, aimed at establishing key standards for hazard mapping, and testing the constraints and opportunities for detailed risk and vulnerability assessment. Activities included:

1. A project to review trends in land-use and implications for disaster damage.
2. Publication of topographic maps showing risks of flooding in high risk, densely populated areas.
3. Assistance to Meteorological Office with wider dissemination of rainfall records (annual, monthly, and daily).
4. Assistance to the National Rivers Authority (NRA) with collection and publication of river discharge records.
5. Special technical support to the NRA and the Electricity Generating Corporation in assessing the vulnerability of dams, particularly large earth dams.
6. A review of interindustry relationships in potentially vulnerable areas

A central focus of disaster-related activity before the disaster was the emphasis on identifying professionals involved in large-scale project preparation within the government's planning systems, and to provide them with detailed training in relating data on natural hazards impacts to investment plans. Material was being assembled for an on-going course aimed at staff from the ministries of Agriculture, Internal Affairs, Finance, and Telecommunications, and the Electricity Generating Corporation, and the National Rivers Authority. Joint training of these staff was seen as one way (of many) of improving the level of integration of planning for development in relation to natural hazard impacts (for example, in relation to the interdependence of "lifeline" systems).

For several months before the disaster a number of senior UN officials had been pressing for the government to establish an Office of Economic Preparedness within the Ministry of Finance. This initiative was described earlier. A key aspect of this initiative was the proposal that the Office would co-ordinate the work of specialists from government departments, universities, and professional associations, working with task forces of economists, insurance industry specialists, meteorologists, hydrologists, cartographers, civil and mechanical engineers, and industrial engineers to review national vulnerability, and means of incorporating mitigation measures into national planning.

UNDP was also concerned to encourage the government to upgrade the national disaster plan. Before the disaster it had proposed a programme of technical support through UNDRO in a number of key areas, including the preparation of vital facilities lists, design and implementation of effective emergency operations centres, improvement of public warning procedures, advice on emergency communications, and assistance with the design of training schedules.

Within the UN system in-country, a Disaster Management Team had been established the previous year. In addition, a number of individuals had been given the responsibility of acting as focal points for monitoring and promoting disaster mitigation in UN sponsored projects and programmes, and promoting information exchange with government, NGOs, industry, and other external donors. An internal inventory of projects had begun to identify opportunities for introducing additional disaster mitigation initiatives at low cost, and with minimal disruption. Much of the initial work of the DMT had concentrated on planning for its role in post-impact assessment, and on reviewing co-ordination requirements for the UN as a whole. A range of potentially overlapping roles were identified, and a number of meetings attempted to map out the various domains in which the agencies would aim to operate. One especially positive outcome of the discussion was an agreement to revise and expand the emergency communications plan for the UN offices in-country.

## **The UN Contribution After the Disaster**

The main UN contribution during the early response came from the joint assessment teams, as described earlier. UNDRO carried out its usual role in co-ordinating information flows.

A team from the regional economic commission was called in to help the national co-ordinator to compile more effective economic statistics for the damaged region. Technical assistance was also provided in the design and implementation of a computerised database, and a prototype Geographic Information System for the analysis and reporting of damage information. One useful initiative here was the way in which the insurance industry was brought into the damage reporting process, enabling a much more detailed analysis of damage to commercial properties to be made within the first two months. However, the damage to infrastructure made even commercial damage surveys and reporting extremely difficult and inevitably very patchy, and one lesson for all the agencies involved in the process was the need to invest more heavily in team communications, methodologies for sample surveys, and off-road transport.

After the first month, UNDP began a substantial re-orientation of sections of its country programme, to make maximum use of the concern and potential changes in attitudes generated by the disaster. From the start, the country office put much emphasis on the role of promoting detailed background analysis for recovery plan development, offering a range of technical support to the Ministries of Finance and Interior Affairs. Among the support proposed was a programme of sample surveys to monitor changes in selected economic indicators, including the following:

1. Collecting information on emerging bottlenecks and shortages of materials and skilled labour.
2. Monitoring price changes on end products.
3. Attempting to develop price indexes of selected item groupings.
4. Monitoring on-hand inventories for selected items within critical industries.
5. Monitoring wage rates by occupation and area.
6. Monitoring levels of unemployment by skill.
7. Monitoring production rates for selected items.

Major donors, including a number of UN institutions, offered specific support to try and reduce shortages of materials regarded as crucial for recovery by promoting indigenous production. These included substitutes for galvanized sheeting, building materials, and nets for the fishing industry. Similar programmes of support and guidance for retraining were also discussed, although few were actually implemented.

Beyond this support for the process of economic recovery, the primary concern was to establish a systematic programme of project and programme review for vulnerability to natural disasters, opportunities for additional mitigation, and contribution to risk. Fortunately, the basis of such a strategy was already in place before the disaster, and many of the required initiatives (described earlier) had formed the framework for the forum of intense debate, discussion, and agenda building that occurred in the weeks following. After the disaster, the office continued its efforts to build a constituency for

long-term mitigation, working with the contacts and links made before the disaster, and taking advantage of the sudden widespread increase in concern. What changed especially was the degree to which this constituency could be mobilized in support of specific programmes and projects, some of which had already been considered before the disaster, and others proposed afterwards or "discovered" as the result of detailed assessments.

One useful exercise, started quickly by the local UNDP office, working with a local development research NGO, was to make a series of local surveys of indigenous coping and recovery strategies among different groups of people affected by the emergency. Several communities were identified, and a small team of field workers spent the next three months visiting, and often living within these communities, exploring the external constraints on spontaneous recovery at this level.

Support for community level mitigation initiatives was inevitably patchy reflecting a range of political factors. The overall policy was to seek out activities which were already being fostered by indigenous groups and organizations, and which had some connection with national or international NGOs with a strong local emphasis. Outside assistance would take the form mainly of training, support for research and information sharing, and financing of demonstration projects. Amongst the initiatives proposed by local groups were the construction of community cyclone shelters, crop substitution (including planning small areas of "insurance" flood and wind-resistant crops, easily stored, with planting and harvesting cycles outside the high risk periods), reforestation to prevent landslips, protecting and reinforcing local food storage warehouses, training programmes on basic hazards and protection for school children, use of reinforced water jars to protect possessions, building flood embankments around local clinics and schools, construction of community livestock shelters on high ground, and low cost insurance schemes for tools and equipment.

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