

Part Three: Rehabilitation and Reconstruction

K. Rehabilitation and reconstruction activities

Responsibility for drafting a list of reconstruction priorities was assigned to the Minister of Finance at a somewhat chaotic cabinet meeting on October 6th. This was challenged during the meeting by the Minister of Internal Affairs, whose department encompassed local urban and rural planning and development. However, the less than impressive performance of that Ministry's emergency preparedness departments had been obvious to all, and there was little support. The Cabinet's discussions touched upon a number of important issues concerning reconstruction, but the pressing needs of the relief action, and its likely political aftermath, meant that several key topics were omitted. Those that were covered included:

1. The need for early decisions on organizing detailed damage surveys, and the opportunities for collaboration with the local offices of the World Bank and UNDP
2. The need for an overall policy for restoring regional systems and encouraging the recovery of regional economic activity
3. The possibilities for allocating of responsibilities for recovery planning and management among various ministries
4. Questions on the need for new building codes and how to enforce them in practice.
5. The need for early decisions on reconstruction standards for critical facilities.
6. A short discussion on the need to implement new mitigation measures for housing, schools, hospitals, and other public buildings
7. Questions on the need for price controls on building materials
8. A call for an early decision on how to assess housing damage for compensation.

Setting Priorities

Over the next two days, an ad hoc task force within the Ministry of Finance developed an outline plan specifying the overall priorities for the first stages of rehabilitation and recovery. These covered a range of sectoral areas, and focused in particular at restoring the government's apparatus for monitoring and control of administrative activity, and the basic "lifeline" systems in the damaged zone. Quickly a distinction was being drawn in discussions between "replacement" reconstruction and "development" reconstruction. Replacement reconstruction aimed primarily at rebuilding destroyed capital stocks. Development reconstruction aiming at improving existing organizations, structures, and activities. Elements of both these were present in the first listings of priorities:

1. Restore power, and basic switching equipment at main telephone exchanges in urban centres to reconnect undamaged local government communications links.
2. Restore damaged or destroyed local telephone links between surviving government offices, police stations, public utilities, and medical centres.

3. Restore regional telecommunications and transport, starting with the main telephone trunk network links and the roads to Province centres, and the main international route leading through the damaged area. The need for a bus service out of the area (to allow those with relatives elsewhere to leave temporarily) was acute. There was also much concern amongst businessmen in the capital about the disruption of the major road and rail links with the neighbouring country - a strategic trading route. Two of the key bridges on this route had been either weakened or destroyed. There was an urgent need for pontoons, and for transshipment facilities for some loads.
4. To quickly improve mobility of people and flows of goods within the affected area. A key requirement was to open routes throughout the area to enable marketing of produce and goods. Priorities included removal of large trees blocking roads, clearing of landslips, and provision of pontoon ferries on washed-out trunk routes.
5. To begin to restore power generation and distribution. The need to restore power to urban water supplies, telephone exchanges, and hospitals was acute. the problem was complicated by the fact that much of the power for the area was transmitted on new long-distance power lines from hydroelectric dams to the North. Most of these lines were down, particularly at points where they crossed deep valleys in the foothills. A local natural gas-powered generating station was operative near the Freeport, and remained connected to the surviving elements of the regional grid. Its transmission lines to the industrial area were damaged, and several circuit breakers had failed. The oil company which ran the refinery was making urgent requests to the Prime Minister for the priority recovery of power transmission to their plant.
6. To remove bottlenecks in the availability of critical building materials. There was already a serious shortage of cement and steel reinforcing rods in the country as a whole, and prices were rising rapidly by the third day of the disaster.
7. To increase food production in affected area. There were five strands to this policy. First, to increase the acreage under cultivation, and to increase the availability of seeds, fertilizer, and pesticides. Second, to make tools, water pumps and insecticide sprayers available as widely as possible. Third, to improve access to loans where necessary. Fourth, to reconstruct damaged irrigation systems. Fifth, to increase availability of inputs for the fishing industry. And sixth, to rehabilitate veterinary services as quickly as possible.
8. To accelerate reconstruction in the health sector. This would include reconstructing clinics, health centres, and hospitals to cyclone-resistant standards, replacing damaged equipment, and attempting to ensure that local staffing constraints (as a result of housing damage, and movement of families) could be overcome.
9. To reconstruct damaged schools to a higher standard of wind resistance, and to incorporate simple extra provision for water storage and emergency sanitation.
10. To reinforce the facilities for vocational training, focusing on bottlenecks caused by shortages of skilled manpower, particularly in the construction sector. It was also recognised that there would be a need to provide income generation for groups who have been especially badly affected.
11. To establish a crash programme to support and educate reconstruction planners at both national and local level, including a request to a number of international donors for technical support.

Over the next week, the Cabinet attempted to agree on a structure for co-ordinating rehabilitation activity. They recognised a number of choices:

A specialised new independent commission for rehabilitation

Creation of an office for rehabilitation within an existing ministry

Formation of a co-ordinating office for rehabilitation within the Prime-Minister's department.

Eventually, a Cabinet-level rehabilitation committee was formed. After much discussion, it was decided to assign the co-ordination role to a new office within the Executive Office of the Prime-Minister. The functions of this office were presented in outline:

1. Overall planning: develop policy framework and disbursement procedures; develop work programmes and budgets
2. Co-ordination with other ministries
3. Monitoring and supervision of registration arrangements
4. Donor relations: liaison and reimbursement claims
5. NGO co-ordination
6. Finance and cash flow monitoring
7. Accounting (including accounting to donors)
8. Comprehensive programme monitoring
9. Co-ordination of grants and subsidies
10. Development of overall criteria for support and prioritization

The choice of criteria was significant. The initial listing contained nine general topics (see Box)

BOX

Criteria for Priority Rehabilitation Programmes

1. Direct and indirect contribution to restoring essential services
2. Total cost
3. Percentage of district and regional reconstruction budget
4. Likely timing to completion
5. Number of people served
6. Contribution to longer term development
7. Jobs created
8. Administrative manpower requirements
9. Debt implications

After strong pressure from the Ministry of Finance, it was agreed to establish an Office for Economic Preparedness within the Finance Ministry. In addition, the task of preparing a draft regional economic recovery plan was assigned to the members of the ad hoc task force within that Ministry.

Decisions on Compensation Policies

During this period, one of the most pressing problems was the need to decide on the policy for compensation for those who had lost relatives or property in the disaster. It was decided quickly that those who had lost relatives (or at least those who could prove their loss) would be eligible for a small grant, mainly to cover funeral expenses. The more difficult question was whether to make grants or loans to those who had lost property.

Those favouring loans argued that much less government funding would be needed to support reconstruction; money that was repaid can be assigned again for lending, and a much larger population could be supported than if grants were provided. They also suggested that there would be far more problems of switching from grants to loans than vice versa, because of the likely inequities. It would be much easier and more politically acceptable to change from loans to grants. Those favouring grants argued that many people would need to take on a major debt burden for reconstruction not only of housing, but also of productive facilities - businesses, agricultural production, and so on. This would probably also be in addition to arrears for previous loans for items destroyed in the disaster. They also suggested that many poorer people affected by the disaster would never be able to pay back loans anyway, and that those groups would in most cases be the worst affected. They also pointed out the problems likely to be encountered in setting interest rates for government backed loans, especially in relation to commercial interest rates.

It was commonly recognised that larger loans for housing reconstruction tend to provide extra employment in the construction sector, and that reconstruction of larger housing would generally be ineligible for grants anyway. Some also suggested that easily available loans might encourage producers to purchase more expensive, but more efficient tools and equipment.

Eventually, some elements of a compromise were reached when it was agreed that activities that were income-generating should receive loans at higher interests than those that are not (Eg. house rebuilding), and that people with very low incomes who could prove the loss of a home would, wherever possible, be given a cash grant equivalent to a small basic house.

Local Responses

Whatever the government policy, it was quickly clear that people were seeking credit. Subsequent investigation showed that in the rural areas affected by the Cyclone, the formal credit sector only provided about 40 percent of the total credit. Many members of the rural community obtained financing from relatives, traders, or small money-lenders. Rates were high (ranging from 20 to 100 percent per year), but this type of credit was quickly and easily available.

People who expected to get some kind of housing reconstruction grant from government (after an unguarded remark by a Government Minister on national radio) started to borrow early on from local money lenders at interest rates of 40% to 60%. Many also made informal arrangements with contractors to reconstruct housing on the expectation that the eventual government grant would be used to pay them back. Within the next two months, there was an outcry when government officials started to suggest that those who had already rebuilt a house would not be eligible for grants.

From the start, the commercial banks resisted calls to refinance or write-off loans on destroyed goods. Issue of new loans was delayed by damage to some bank records and problems in reconstructing communications. Postage delays, and damage to the embryonic data transmission networks lead to further delays in loan processing.

L. Weaknesses in Early Rehabilitation

In retrospect, it was agreed that a number of crucial mistakes were made during the first month after the disaster - mistakes which had a direct and significant impact on development outcomes for several years, and which also had important implications in a subsequent cyclone in the same area six years later.

Initial damage assessment of "lifeline" systems was delayed, and technically flawed.

The technical specialists doing surveys of critical systems, were operating under a number of constraints. Several had to make provision for their own families as well. The teams lacked sufficient transport. They lacked information services and secretarial support. And there was inadequate communications between the teams and external consultants and donor agency specialists. Data produced in these assessments was not collated centrally for weeks. There was an urgent need for a co-ordinating cell within the national emergency operations centre which could keep track of:

- The status of "lifeline" systems in the damaged area.
- The status of repair operations
- The national availability of repair resources
- The relationship between repair activities and changing local economic and social priorities, including shifts in population
- Opportunities for donor support for building new mitigation measures into the reconstruction programme.

Assessments in several areas failed to take account of the government's budget cycle.

Departmental budgets in central government were established in a round of consultation in early December. Provisional funding for reconstruction activity was also allocated to each Ministry and Department during this round. In some cases, assessments of damage did not reach the ministry concerned until after the budget round was complete.

Methods for selecting new investment projects in the face of future potential disasters were not adequately examined by government agencies and banking institutions. Staff were unaware of methods for dealing with risk and uncertainty of future hazard events in relation to financial investment.

There was an insufficiently comprehensive assessment of the patterns of damage to domestic housing. There was little initial assessment of the patterns of failure of common building types (in relation to design, materials used, and quality of construction). The main levers for change - government grants and loans, and building codes - could not be used when they were needed.

There was inadequate assessment of overall construction material needs early on: no efforts were made quickly to boost production from indigenous industry. This placed an extra burden on the balance of payments as imports of roofing materials and cement were drawn in. In addition, the lack of availability of appropriate building materials led to increased vulnerability in some areas. For example, to reduce the problem of roof damage and flying debris in windstorms, roof sheets and metal cladding needed to be not less than 0.5 mm for galvanised steel and 0.9 mm for aluminium, to prevent shear, bending and buckling in high winds. A lot of the material provided was less than this, and many new or repaired houses were more vulnerable than before.

During the first month, while spontaneous reconstruction was already starting, *little analysis was made of the urban design features which contributed to damage* (Eg. grid patterns, and effect of proximity between buildings on wind loading). The reconstruction simply replicated the previous pattern of vulnerability.

The sensitivity of economic sectors to the loss of critical industrial facilities and important material and energy inputs was not examined closely before the disaster. It took several months before planners began a detailed review of the impact of different future damage patterns and resulting bottlenecks on inter-industry flows of materials and national output.

Insufficient attention was given to the informal sector early on. In fact, much of the domestic reconstruction was accomplished by individual craftsmen and family enterprises. There were various opportunities for providing training and information, and subsidies for key housing materials likely to contribute to safer reconstruction. Almost all these opportunities were missed. Even rather obvious opportunities were missed. For example, the local authorities missed the opportunity to support the rapid recovery of local sawmill capacity to cope with locally available timber from trees felled by the storm.

Some specific administrative problems at the local level were not anticipated. It proved especially difficult to integrate different sectors when planning at the local level; for example, housing and business reconstruction at the same time. It proved very difficult to encourage planning staff to consider cross-sectoral issues.

The employment of village headmen to disburse grants proved to be less than ideal. In general, relatives of these people tended to receive preferential treatment.

Impact on Different Groups

The problems facing each socio-economic group during the rehabilitation phase were often markedly different.

The majority of *fishermen* had boats of less than 10 metres, and operated close to shore. But there was also a fleet of several hundred larger vessels. The boats that survived suffered substantial damage to hulls and fishing tackle. Almost 90 percent were affected. The owners suffered an almost complete loss of income while their boat being repaired. Employees were displaced. Wage labourers on boats were forced to try and seek land jobs. For boat owners, the main problems involved registration for assistance, and delays in grants administered by the Ministry of Agriculture. Most small-fishermen were migrants, and neither they nor their families were registered in the local districts. The families of those who died received no death grants. And those who lost housing were rarely able to prove residence. In the next few months, in some areas at least, arrangements for disbursing grants for rebuilding and purchase of equipment disintegrated into a maze of bureaucratic hold-ups, intimidation, and local frauds. A number of major opportunities for development in this sector, such as providing cold storage facilities to help fishermen preserve catches, fuel storage for fishermen's co-operatives (to lower fuel costs by bulk purchase), and loans to co-operatives for larger and more efficient boats, were eventually recognised, and proved successful in the long term.

About one month after the disaster, a meeting of major donors established support for an *emergency food crop programme for farmers* in the affected area. They allocate funding of \$300,000 for purchase, transport, and distribution of seeds, fertilizers, pesticides and other inputs to registered vegetable and food crop producers. The government was requested to provide farmer registration lists, and to appoint Provincial co-ordinators for the programme. The Ministry of Agriculture was asked to provide plans setting out targets for acreages, crop types to be grown, planting dates, and input requirements. A number of participants at the meeting asked the obvious question about why plans for this kind of recovery activity had not been made before the disaster.

Tree crops, including coconut, rubber, oil palm, coffee, and fruit, suffered badly. There was widespread defoliation of trees and stripping of fruits, and some uprooting, particularly palms near the eye of the storm. Trees differed in their susceptibility to snapping of trunks and branches. Mangoes and citrus in particular escaped most damage. Avocados were very badly affected. Tree crop cultivators estimated that it