SCOPE OF PREPAREDNESS

Flood preparedness should focus on:

-- warning;
-- evacuation;
-- structuring the emergency response.

POLICY RECOMMENDATIONS

Overall Policy

In order for disaster preparedness to be effective, it must be community-based and be built on responding to all major hazards. Therefore, it should be the policy of the government that all flood preparedness measures should

-- be planned from the perspective of the communities most likely to be affected;
-- give priority to those measures that will build awareness of, and stimulate more effective response to, all major hazards, especially tropical cyclones.

General Policies

1. Priority should be given to making warning systems viable at the village level. Given the current constraints on delivery, priority should be given to improving the warning system below the district level. Emphasis should be placed on utilizing village-based resources for observations, interpretation, and alerts. The indigenous "folk warning systems" should be investigated and priority should be given to development of realistic, cost-effective, low-technology warning systems over highly sophisticated, costly, systems that at present will not yield an appreciable increase in warning time or change the patterns of response.

2. Priority should be given to developing effective evacuation programmes for people remote rural areas. Successful evacuation depends on:

-- strong links to locally generated warnings;
-- clear instructions from credible, respected, local leaders as to where to go,
-- availability of close-by, safe, shelters or evacuation sites in high areas near to villages that meet rural peoples' needs for shelter, food, and storage of personal affects. Depending on the situation, these shelter areas could include: buildings, elevated platforms, expanded roadways or multi-purpose community flood shelters,
-- prior arrangements being made for protection of livestock and movable assets
-- availability of village-level transport appropriate to the environment; and

3. Emergency responses to floods should be reviewed and more effective, comprehensive plans should be developed. It should be the policy of the government to:

-- initiate planning at the community level. To improve coordination between the assisting agencies, efforts should be made to involve the Bangladesh Red Crescent and NGOs in the local planning process.
-- involve villagers in preparing local plans; and
-- to give priority to those activities that stimulate self-reliance, promote cooperative community involvement, and contribute to overall community development.
-- build upon the work already carried out for cyclone preparedness and to give priority to activities that would be mutually supporting between cyclone and flood preparedness.

PREPAREDNESS COORDINATION

Preparedness cannot be divorced from overall prevention and mitigation activities, structural or non-structural. As a general policy, the government should integrate the preparedness function with the ministry ultimately given responsibility for emergency response (currently the Ministry of Relief and Rehabilitation (MORR)). However, in order to fully integrate all flood (and cyclone) related activities, a comprehensive review of institutional arrangements should be carried out.

As a general principle, overall responsibility for emergency management should be vested in a strong line ministry with operational capabilities (communications, equipment, and transport). An alternative is to delegate prevention-mitigation responsibilities to a ministry with full-time responsibility for planning, construction, and maintenance of flood prevention and mitigation projects and to delegate the relief and response function to a specialized social service agency; preparedness plans would be jointly developed.

PUBLIC AWARENESS

Public perception of risks and the efficacy of the various options that are available will ultimately determine the success of any flood prevention, mitigation, or preparedness programme. It should be the policy of the government to provide a broad base of information to the public about floods and the various options that are available and to stimulate wide discussion about possible solutions. It is therefore incumbent that an extensive public awareness effort be mounted and that as the
flood season approaches, communications about disaster preparedness measures be intensified. Techniques such as including preparedness measures in farmer's almanacs, designating national dates for bund repairs, etc. should be investigated and developed in accordance with local traditions and practices.

**ACTION RECOMMENDATIONS**

**A. Re: Warning**

1. Conduct Hazard Perception Studies in threatened areas.
2. Study traditional responses to floods.
3. Study traditional community preparedness activities.
4. Study traditional "folk warning" systems.

**B. Re: Evacuation**

1. Study local evacuation patterns, identifying:
   a) local pre-evacuation behavior,
   b) response triggers,
   c) evacuation behavior,
   d) the relationship between lead-time and specific actions.

2. In conjunction with the Bangladesh Red Crescent and the Association of Development Agencies in Bangladesh (ADAB), develop a community-based evacuation strategy.

3. Develop a model locally-based evacuation plan that can be adapted, at the village level, to specific local needs.

4. Develop a portfolio of formal and non-formal communications media to use in a nation-wide public awareness campaign.

5. Investigate the potential for building in- or near-village elevated sites for evacuation. Possibilities include: raised platforms adjacent to villages, expanded areas along elevated rural roadways, and further elevating existing roadways.

6. Develop standards for designation and operation of flood shelters in towns and flood threatened areas of cities and begin the process of preparing a national shelter programme.

**C. Re: Emergency Response**

1. After designating the focal point for disaster preparedness, initiate the development of a comprehensive Emergency Action Plan. Components should include, but not be limited to:
2. Initiate a study of non-structural agricultural adjustments that can be, and are being, made to mitigate the impact of floods, and on the basis of that study, develop a national plan for promoting those adjustments.