

**Civil Society Input to the Permanent Shelter Rehabilitation and
GOVT-NGO Partnership Policies
for the Tsunami-Affected Communities in Tamil Nadu**

Submitted to the Govt of Tamil Nadu in Chennai by the NGO Coordination
Centre, Nagapattinam, with Support from the Auroville Tsunami Relief Center
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IMPORTANT NOTE (MUST READ):

This note was submitted to the Government of Tamil Nadu on January 13, 2005, in response to its urgent request for input and was prepared with input from NGOs and community groups in the Nagapattinam area, from Auroville, and from people from other parts of the country who have experience in post-disaster management. We have no idea if, and in what form, this paper might influence government policy; however, we are sharing it widely with donors and NGOs in the interest of transparency, as there has been no time to consult widely. We welcome your feed-back, which may be sent to [tsunami ngp@rediffmail.com](mailto:tsunami_ngp@rediffmail.com) and to bhoomikaindia@yahoo.co.in. While we may not be able to individually respond to your feed-back, we shall certainly take any additional input to the government, should there be further opportunities to provide such input.
--NGO Coordination Centre, Nagapattinam

Input to the Permanent Shelter Rehabilitation and GOVT-NGO Partnership Policies for the Tsunami-Affected Families in Tamil Nadu

Submitted to the Govt of Tamil Nadu in Chennai by the NGO Coordination Cell, Nagapattinam, on January 13, 2005

Since the Latur earthquake, each subsequent disaster has been contributing to refinements to shelter reconstruction policies, based on the lessons learned, mistakes made, and the achievements of the previous policies. Having taken cognizance of earlier shelter rehabilitation policies, the following recommendations focus on those aspects that can contribute to a more owner-driven, technologically appropriate, efficient, equitable, and culturally/environmentally aligned reconstruction and rehabilitation programme for the communities affected by the Tsunami.

I Developing an Owner-Driven Shelter Policy:

1. The policy should ensure that the shelter reconstruction programme, in particular, is an owner-driven approach – where affected families/communities are involved in the planning and execution of their own shelters and habitats.
2. Such an owner-driven approach can be primarily ensured by providing the assistance amounts, as direct cheque payments, to the affected owners, in 3 installments (based on the completion levels). However, this must also be accompanied by technical support to the community, in each village, and a monitoring mechanism by recognized technical institution(s), which can ensure the standards of construction.
3. The reconstruction programme must be guided by a standard set of technical guidelines for seismic-safety, cyclone-safety, wind-proofing, etc; the guidelines should be framed based on national norms and guidelines, after also taking into account the context of local geological conditions.
4. Similarly, design guidelines for houses, infrastructure, and planned habitats should be framed keeping in mind environmental, ecological, and cultural contexts of the communities that are in need of rehabilitation in this disaster. Design guidelines should inform and guide different housing designs that may emerge in different villages. It is important that we NOT rigidly and mechanically repeat a small number of designs in all the villages, irrespective of the micro context of the particular village/community.
5. Most rehabilitation and reconstruction programmes end up strengthening economies that are outside of the affected communities, rather those of the affected areas, which are most in need of economic revival. In order to mitigate this, the shelter reconstruction programme must ensure that as far as possible, the programme benefits the local rural economy of the affected areas. This can be achieved by ensuring that local skills – masonry, carpentry, blacksmiths, etc, and local material and technologies are incorporated into the construction process, and integrated with appropriate technologies and

material from the outside. In the end, the choice of technologies, material, designs, etc. will clearly determine the reconstruction and rehabilitation approach.

6. *While immediate and interim relief have to be extremely speedy, it is critical that permanent shelter reconstruction be undertaken only after a basic assessment has been undertaken with the affected communities on the nature of their habitat and houses--it is important that the new reconstruction be integrated with the nature of their livelihoods. At least the next one month should be utilized for the above assessment, and for preparing technical and design guidelines, before the permanent shelter rehabilitation policy is announced.*

II GOVT-NGO Partnership:

1. We must clearly define each NGO's role, based on their areas of strengths, and their desired area(s) of involvement, before formulating a broad public-private partnership. There are clearly three types of NGOs – all of whom must contribute to the reconstruction and rehabilitation process:
 - a) **Donor Organizations**, which could be corporate houses, religious/spiritual charitable trusts, international NGOs, international aid agencies, and national institutions.
 - b) **Developmental Organizations**, which work with, and mobilize communities at the grass-roots, in the area of rural development and empowerment.
 - c) **Community-based Organizations**, such as self-help groups, fishworkers cooperatives, federations, etc.
 - d) **Technical Expert Institutions**, research organizations/institutions and individuals.

While a Donor Organization is a body investing financial resources, primarily in the reconstruction and rehabilitation programme, it is recommended that a Donor not become direct implementing agency in reconstruction/rehabilitation. It is critical that they be partnered with a Developmental Organization which will primarily facilitate the rehabilitation process in the villages to ensure that reconstruction is undertaken with the active participation and ownership of the affected communities.

The role of the **Facilitating Organization** is to invest in human resources with managerial skills and with a long-term development perspective. The community or a Community-based Organization, where possible, should ideally be involved in conflict-resolution, in ratifying the plans, and in resolving individual issues, grievances, specific requirements, etc. in the reconstruction process. The role of this body becomes more critical in the reconstruction of the public infrastructure.

2. *In Tamil Nadu there is already a strong tradition of community organizations and now SHGs. It is important to ensure that this strength is*

not compromised in the public-private partnership and a tripartite partnership is developed between the Government, Donor Organizations, and Facilitating Organizations in the reconstruction and rehabilitation programme.

3. It is suggested that a mechanism be developed whereby organizations can express their intent and extent of intervention they would like to undertake; and to get them registered clearly for specific regions, purposes, and village(s), to ensure that there is no duplication of effort.
4. **It is also suggested that a small Steering Committee, comprising Government and NGO representatives, be formed**, which identifies the many different organizations wanting to reconstruct and rehabilitate villages, based on their desired intervention, and the nature of their organization.
5. **It is strongly recommended that the Government clarify--within the next week--that affected villages in Tamil Nadu are not up for 'adoption,'** and that organizations would have to enter a rehabilitation and developmental partnership with communities in a manner which respects their socio-cultural, economic and cultural norms. Such a clarification would restore the self-respect and dignity of the affected communities and regions, which are being bombarded with well-intentioned, but sometimes undignified, ways and expressions of relief and support.
6. The GOVT-NGO partnership should not be restricted to the reconstruction of permanent shelters alone in specific villages. It should be extended to sector-specific partnerships with technical/research organizations, which may provide input to the entire affected region or parts of the affected coastline villages and communities. For instance, Tamil Nadu and Kerala architects and shelter foundations have contributed extensively to the country's understanding of appropriate, environment-friendly, shelter technologies and habitat planning. They should be invited as a consortium to provide input to the shelter reconstruction process.

III Equity in the House Reconstruction Process:

1. The government must make it VERY CLEAR in the permanent shelter rehabilitation policy as to whether the Government is paying a 'compensation' and/or 'assistance' in reconstruction. While the former could lead to inequities, the latter is a more equitable form of support for permanent reconstruction.
2. Under the GOVT-Donor partnerships, there should ideally be a ceiling on both the area of reconstruction and the amounts that will be budgeted for each family. In the absence of such a norm, different donors and partnering facilitating organizations can create severe inequities based on the extent to which they want to support.

3. It is recommended that a basic ‘core’ house/floor area be supported, and the house owners be allowed to extend their house by themselves, as their livelihoods revive.
4. A policy for damaged houses must be developed--rather than having multiple damage categories based on extent of damage, and applying differential norms for assistance, all damaged concrete or ‘pucca’ houses should be ‘supported’ with a flat amount for retrofitting their houses, if they can be retrofitted. (This will prevent administrative nightmares and delays.)
5. In determining whether a house has to be retrofitted or reconstructed, it is suggested that norms be developed for defining what is ‘livable’ and what is ‘not livable’. All houses which are not livable should be supported for full reconstruction; and all those which are livable, but damaged, should receive support for repair and retrofitting.

IV Lessons Learned from the Gujarat E/O Shelter Reconstruction Policies:

1. **In the Gujarat Earthquake, there were two policies:** The primary one was an owner-driven policy, where the Government provided ‘assistance to reconstruct’ directly to those whose houses were fully or partially damaged. This was done through cheque payments to each affected family. However, it also put into place a structured public-private partnership for ‘NGO’ involvement in the permanent reconstruction and rehabilitation of the affected villages. Villages could choose whether they wanted an NGO to support them or not. If they did choose to get NGO support, they would get only 50% of their direct assistance from the Government, and the NGO would support the deficit with whatever amount that they wanted to put into the reconstruction of a house. If the village chose not to go with an NGO, then they would get the full 100% of their assistance in three stages based on the completion of their work. It must be noted here that 72% of the villages chose to construct their house without an NGO, and they were helped by an engineer from the Government placed in each village; and 28% of the villages were supported by NGOs. This policy, which worked basically to undertake a quick, owner-driven rehabilitation, while creating space for private participation, however, needs to be critically examined, redefined and refined in many ways.
 - a) *Wherever people were enabled to construct seismic-safe houses directly, with Government providing assistance, they were most satisfied with the final houses, and their habitat*** – because, after all, the reconstruction was controlled by the affected owner. It is also important to note that wherever people constructed directly the speed of construction was faster than where an NGO was involved – going against the common perception.
 - b)** However, the huge scale of direct monetary disbursements—even through the banks—led to a fair degree of corruption, stemming essentially from the exaggerated extent of damage claimed by the affected person during the damage assessments. Thus it is important to

curtail this through clear and one-time (not repeated) shelter damage assessments.

- c) The 'NGO' was everyone who was not the Government – which included corporate houses, donor/aid agencies, religious groups, and grassroots developmental organizations. Thus, in 28% of the housing reconstruction where NGOs were involved, there was a major differences in the way all these categories of NGOs worked; and four years after the disaster, an assessment shows that while donors and corporate houses worked directly with the village, **the reconstruction programme was by and large without the community's participation or even consensus in house designs.** The houses were not aligned to people's ways of living, and used material and technologies that were not suited to the weather and living conditions of the communities. **Today, in at least 11 such villages, houses lie unoccupied.** On the other hand, **wherever donors or corporates contributed and worked through grass-roots developmental organizations, the reconstruction was undertaken with a very high level of community participation, apart from being fairly quick.**
2. In terms of direct assistance for reconstruction to the affected families, what worked was paying it in installments – with the three installments being paid at three levels – completion of plinth, lintel, and roof. However, in the urban rehabilitation, a critical mistake made was that in order to convince the affected that the Government was moving fast, the first installment was provided even before land access, engineering support, and technical by-laws were in place; as a result of which the first installment was spent by the affected families on other things, and a number of very low income families found it difficult to access the second installment, because they did not have their first foundation and plinth up. **Thus, it is important to have all the support mechanisms ready before the disbursal of payments.**
 3. In the Gujarat earthquake, during the first phases of policy making, there was confusion as to whether the amount being paid for the permanent rehabilitation was 'compensation' or 'assistance' to reconstruct. While it was termed as assistance, the norms of payment was that of a compensation (a unit cost was paid for the amount of square feet lost, making the basic remuneration inequitable). Thus, it is important to clearly state whether this is a compensation or assistance, and develop the norms in an equitable way.
 4. Similarly, there was no ceiling on the amount of money that different NGOs could invest in reconstruction. While local developmental organizations themselves broadly agreed that their support would be to a 'core' house, (250 sq ft), and not to exceed Rs. 45,000, (a policy that was followed in 107 villages by the local network of organizations), there were at least 125 other villages where international donors, corporate houses, and other State Governments spent sometimes up to Rs. 1.5 lakhs for a reconstructed house. It must be noted here that the square feet constructed in the 45,000 'supported' houses, and in the 1.5

lakh other houses was more or less the same. Thus, as a policy, the GOVT-NGO partnership should ideally set a ceiling on the sq ft, and also decide whether it is a basic core structure that it is supporting, or an entire house, which could even be 600-700 sq ft. This also contributes to equity in the shelter policy.

5. **As previous disasters have shown (with support from Prof. Arya, of Roorkee), what is required is NOT A STANDARD PRESCRIPTION FOR DESIGN which everyone is expected to implement in a uniform fashion, but a common set of technical guidelines for seismic-safety, cyclone-safety, etc.** The common guidelines created by Prof. Arya, disseminated by the Gujarat State Disaster Management Authority, and monitored by a reputed institution, ensured that different villages and communities could choose different designs, as long as they followed the common technical guidelines. This aspect has worked very well. Also, village-level facilitating teams by the local organizations monitored any violations of the guidelines. In fact, alternative and sustainable technology options, such as the use of stabilized earth/mud technology, also had clear guidelines – making it the first time in our country that any government had brought out technical guidelines for the use of local technologies.
6. There are many houses that are partially damaged to various degrees in the tsunami-affected areas. Both in Latur and in Gujarat, damaged houses were assessed based on the extent of damage, and the assistance money for repairs were given based on the extent of damage. This led to a very high level of grievances, because every affected person wanted to get into a more damaged category, and it also led to a fair degree of corruptive practices. It is therefore important to consider all partially damaged houses under one category rather than put them into very nuanced multiple categories. The cost-benefit of this approach as against the expenditure of handling grievances is compelling.
7. Categorizing NGOs or differentiating between those organizations who are donors, and those who are grass-root developmental, or community mobilizing groups would be a definite improvement from what happened in Gujarat. In Gujarat, donor agencies, corporate houses, international aid agencies, etc. - all became lead implementing organizations in villages as also did grass-root developmental organizations. The quality of self-help and participative rehabilitation was often severely compromised.
8. Also, in the Gujarat model of public-private partnership, the partnership was with only those organizations which were into 'reconstruction' of houses or public infrastructure, and brought in financial resourced to do so. **All technical support organizations, or grass-root organizations working in the area of livelihoods, health, education etc. were not in any partnership with the Government,**

which often led to duplications, or a low value-addition to activities other than construction.

V Do's and Don'ts in the Framing of the Permanent Shelter /Public-Private Partnership Policy and in Implementation:

Do's:

1. Immediately make a clear statement to the numerous donors, NGOs, and other partners in civil society, who are waiting to participate in the permanent rehabilitation efforts, that their interventions could begin once the government policy has been framed; and that **ad-hoc shelter or livelihood interventions must not be undertaken till the nature of the government partnership and inputs, and issues such as land/Coastal Regulation Zone (CRZ) have been resolved**. A time period should be indicated when these issues are likely to be resolved.
2. A clarification needs to be issued whether organizations could help improve (or put up new) interim shelters in case the current government-driven interim shelters do not last beyond a month, or show wear and tear.
3. Start identifying key resource institutions at the local level that are familiar with local conditions. in the area of shelter reconstruction, fishing, and agriculture, especially those organizations which are likely to become the focal point for policy feedback, and can also be used by outside organizations for information, advice, and critical feedback.
4. Begin a process of corporate and other donor consultations; and commence meetings with identified and willing facilitating organizations as soon as the basic policy has been framed.
5. A date by which permanent shelters can begin should be set, which will help all the stakeholders to plan; and will release undue pressure upon the State on a day-to-day basis for a response on permanent rehabilitation.

Don'ts:

1. Avoid undue haste in giving permissions to begin permanent rehabilitation (like it happened in the interim shelter phase), till all the mechanisms to actually implement the policy are put in place.
2. Looking at the proposed sequence:
 - Stage 1: Finalizing the overall policy framework.
 - Stage 2. Simultaneously undertaking field assessment for the appropriate selection of land; community feedback on resettlement and habitat planning.
 - Stage 3: Finalizing the policy details
 - Stage 4: Setting up the mechanism for developing partnerships – tax exemptions, registering partnerships, screening and identifying organizations, setting up the State Level Steering Committee, etc.
 - Stage 5: Implementation
 - This entire process should take at least one to two months before implementation should begin.

3. Don't provide financial disbursements till purchase mechanisms for boats and nets are set up; and in the case of shelters till land issues are sorted out. Otherwise, the first disbursements will be spent and when the family is ready for rehab, there will be depletion in the money available.
4. Immediately ensure that the fresh influx of GI corrugated [tin] sheets is not used to improve the present temporary shelters or to build fresh shelters as roofing or walling material. It can be used to make makeshift godowns for material storage, provided the sheets are properly anchored.

VI Housing as a Process:

Housing is often looked upon as a product: 'so many families need so many houses, so deliver them once and the problem is solved.' There is much talk of housing shortages and about figures running into the millions.

Just a casual visit to any planned mass housing that is a few years old will show that housing is a dynamic process. New needs come up all the time, and families add to the structures or modify them to suit specific needs. In reality, housing is a dynamic process where transformation takes place all the time. We often tend to dismiss this process of transformation as a 'problem' arising out of lack of education of the people and our inability to control/ police the process of transformation.

We have a rich vernacular tradition of buildings that offers appropriate solutions to local climatic conditions - the Bhuj "bungas", the Vizag fishermen villages that are cyclone resistant, the way the Nagapattinam thatch roofs come down very low to counter strong winds etc. Interestingly, some local fishermen, in a meeting of traditional leaders from the fishermen villages, have said they would like to build circular huts to minimize impact of waves. This is the solution that the Vizag fishermen as well as Kutch people have been following for many years to resist cyclones and earthquakes, both with a good amount of success. Clearly, this intuitive ability to come up with commonsense solutions is still alive among our communities.

For too long the government and NGOs have been building houses in large numbers for communities all over the country. The results have mostly been disastrous. There is no sense of ownership of these houses. Communities have either rejected these shelters in many places, or have stripped down buildings to salvage materials and the site for reconstruction of their choice. One only needs to make a visit to Tharangambadi and look at the old government housing done for fisherfolk there. **Recent experiences from Bhuj, where there are corporate-built good quality housing lying vacant, clearly shows that it is not just a matter of quality of construction--**where the community doesn't participate in the planning process, there is bound to be a lack of sense of ownership; only a sense of ownership can ensure acceptance and maintenance as time goes by.

The process has to be owner-driven. The owners have to be involved in deciding the policy, site location, site planning, individual unit designs and disbursement of finances. This would also lead to speedier and better quality construction. Money could be handed out in stages to a committee of representatives of the villagers and facilitating NGOs, with clear guidelines of how and when money is disbursed and a transparent accounting system.

Agencies can play a facilitating role in terms of:

- Providing advice on building guidelines. Within the guidelines people should have the choice of planning and building according to individual needs.
- Setting up materials and labour banks to make these easily available for construction.
- The design brief should reflect an understanding of the social and cultural realities of the community.
- Site Planning: Appropriate location at a safe distance and elevation. Where there are no elevated sites closer to older villages, the possibility of raising the site needs to be looked into. At the least it should be ensured that there are safe public buildings similar to the 'cyclone shelters' to take refuge in times of flooding.
- Being a coastal area, particular emphasis needs to be given to drainage. This is both in terms of sanitation to avoid stagnant water and in terms of draining rainwater/ floodwaters. Toilets/ solid wastes management also needs to take note of the high water table.
- Playgrounds for children need to be provided.
- Orientation with respect to sea: Should take into account wind and rain direction and shelter dwellings accordingly. There is much to be learnt from the traditional buildings of the area. The way thatch roofs are anchored to the ground to take care of the winds/ and the good slopes provided to take care of intense rains from cyclonic storms is an example.
- Occupational needs: recognize that fishing is a special occupation with its own needs. Therefore place for boats nets [store outside] and engine that are stored at homes needs to be taken care of.
- Guidelines that need to be put in place to ensure resistance to earthquakes and resistance to high-speed winds.

Owner-driven process will also sensitize the locals as to the way safety guidelines can be incorporated in building so that they get entrenched in the local construction practices henceforth.

To conclude, the need to relocate a large number of communities following the disastrous Tsunami, especially fisherfolk communities, offers a unique opportunity to prepare and implement a **comprehensive settlement plan**.

ANNEXURES

A. Structuring Government-NGO (Public-Private) Partnerships

Introduction

The actors in the non-governmental sphere or “private” domain who can participate in the Tsunami rehabilitation programme may be called upon to play one or more of the following roles.

- 1. Facilitating Organisation**
- 2. Donor Organisation**
- 3. Technical Support Organisation**

The overseeing of the work of these set of organisations will be the task of a *District Steering Committee (DSC)* composed of Government and Civil Society representatives. A *State Steering Committee (SSC)*, once again composed of Government and Civil Society representatives, to sort out policy issues related to the Government-NGO partnership may also be set up. The SSC will also be responsible for selection of Facilitating Organisations and allotting areas for Donor Organisations to fund rehab.

The following are the proposed details of the roles/activities for each category of organization, and the criteria for selecting them:

Facilitating Organisation:

In each of the villages, where rehabilitation work on a significant scale has to be undertaken, including the physical reconstruction of the village itself, there will be one Facilitating Organization, which will perform the following roles/tasks. It is however possible that some of the larger organisations can work as Facilitating Organisations in more than one village.

Role/Activities:

- Work closely with the village community and prepare a micro level plan for reconstruction and rehabilitation
- Liaise with Donor Organizations, government agencies, and Technical Support Organisations in implementation
- Build the capacity of the local village community and institutions for participating effectively in rehabilitation and help them move on to larger developmental roles at the end of the rehab period
- Collect all relevant information for the rehabilitation process and document the various processes

Criteria for Selection of a Facilitating Organisation:

- Capacity and track record of grass roots level community development work
- Willing to work for a minimum of two years in the village(s) allotted

- Have capable field staff who will be based in the village and who will be able to effectively liaise with outside agencies
- **Order of preference should be: local NGOs already working in the affected area, other NGOs from Tamil Nadu, regional or National NGOs**

The Selection Process:

To be done by the State Steering Committee

Donor Organisation:

This could be any NGO, local, National, or International, Corporate house, Intern-governmental organisation or even another State Government willing to put up funds for the reconstruction and rehabilitation of the affected villages. The role of the donor shall be mainly financial support. It is recommended that Donors be allowed to separately support one or more of the following:

- Permanent individual shelters
- Village/Community level facilities and infrastructure (could include water and sanitation)
- Livelihood support (boat, motors, nets, etc.)
- Shore protection measures like mangrove afforestation, tree cover, etc.
- Any other

While some donors may provide funding for more than one of the above in more than one village, a “village adoption” approach (whatever be the semantics used) should be actively discouraged.

As there are likely to be a large number of organisations willing to play the donor role, the State Steering committees will have to play an active role in deciding on which donor will do what and to what extent. The SSC will have to ensure that all villages are covered equitably in the process. It is even possible that if there are too many donors in one district, some of them may be encouraged by the SSC to take on roles in districts that do not have many interested donors.

Technical Support Organisation:

These will be organisations with technical competence in one or more of the areas of rehabilitation.

- Habitat and Building Design
- Coastal Protection
- Fishing Livelihoods
- Agricultural Livelihoods
- Other Income Generating Programmes
- Water and Sanitation

The above is just an indicative list, and organisations capable of playing the role of Technical Support Organisations can be approved by SSC. Alternatively, Donor and

Facilitating Organisations may also choose Technical Service Organisations of their choice. If more than one organisation is capable of providing this service in one thematic area, some coordination among them may be desirable.

Role of the Government in Funding Rehabilitation:

As the State has the primary responsibility for the welfare of the affected population, and there are great expectations of State funding in the affected villages, it may be desirable that the main items of rehabilitation like houses and boat replacements may be done on the basis of Government contributing a certain part of the amount, and donors contributing the rest. While some flexibility may be needed in implementation, significant variations in unit costs should not be encouraged.

Mechanisms Required for Public-Private Partnerships:

1. In shelter reconstruction – Government provides land, exemptions on cement and steel, and 25% of the unit cost which will go as assistance to reconstruction.
2. Donor Organizations supporting shelter and community infrastructure will provide the required finances to the community. The Government share of 25% can be reimbursed after completion, and after the structures are designated as conforming to the technical and design guidelines, and norms of public-private partnership.
3. Communities should be given a choice on whether they want to participate in an owner-driven approach with the support of organizations or would like the support organizations to construct. Their consent should be taken in writing by the Facilitating/Donor Organizations and submitted to the Government before implementation begins.
4. The Government could get the technical guidelines from Prof Arya of CBRI, Roorkee, who has done extensive work on seismic and cyclone-safe structures and has provided his inputs to disasters in India and across the world.
5. Design guidelines to be provided, after inputs from across the country, through the resource institution. It is recommended that the hub for this can be in Auroville, Pondicherry, which is not only in the geographic center of this disaster, but has proven technical expertise and credibility to be a resource hub – but not the only institution inputting.
6. An institution to undertake concurrent technical audits of the progress should be assigned to an experienced organization or institution in the country.
7. A State Steering Committee formed at the apex to overlook all aspects of the public-private partnership should: receive expressions of intent in a prescribed manner; identify, screen and allocate different sectors in different villages to Donor-Facilitating Organizations.
8. Every donor agency will have to identify who their Facilitating Organization will be before submitting their application.
9. District Steering Committee under the leadership of the District Collector, including Technical Support Institutions, and Facilitating Organisations, and relevant government representatives should be constituted for any follow up or support to all the partnering organizations in the district.
10. Consent of letters by Gram Panchayats and Gram Sabhas/village community should be sought for the basic plan of the shelter, habitat, land realignments,

and financial arrangements. The letters should be sought by the Facilitating Organization, and can be checked by the District Committees.

B. Land Issues:

Three separate policy directives may be required for the three different ground situations that appear to exist, based on a quick assessment. And, depending on which of the following categories applies to a particular village, and depending on which type of organization is assisting in the rehabilitation process, the organization must follow the policy directives that are applicable to them.

- 1. Villages where complete relocation of entire village/ settlement is required; and where the entire village – damaged or undamaged -- is within the CRZ, and must therefore be relocated.**
- 2. Villages where partial relocation of the village/ area may be required. Within this, there will be two sub-situations: that part of the village damaged or undamaged within the CRZ; and the rest of the village is undamaged and outside the CRZ.**
- 3. Villages where the entire reconstruction of the village is on the existing settlement: These are villages where there may be minimal damage, and the village is outside the existing CRZ; but the village has faced losses to infrastructure within the CRZ and to their livelihoods. So, as part of the rehabilitation, facilities for boats, nets, auctions, etc. can be provided and infrastructure upgraded to bring them on par with the new settlements coming up.**

Every village must be categorized carefully in the next one month, after consultations with the entire community – primarily the affected communities, but also those less affected within the village, who may be residing within the CRZ. It is very critical that this process is not hurried up without adequate consultations with the community and observations from the field.

The following points are required to be taken into account:

1. There are different income levels within the fishing community, and existing villages have mixed income groups residing with each other. In the new settlement, as plot sizes are allocated, under any of the aforementioned categories, there has to be a well-thought-out basis which takes into account the fact that there are mixed income levels, and that there will be a need in the future for a family to be able to extend/expand. And the basis for allocating land has to be equitable. The Government must not promote inequity, and yet has to be pragmatic in how the settlement will grow in future. In Gujarat, the land allocated to all -- high or low income levels -- was equal. However, if the higher income persons want to purchase a part of the land to be able to extend his/her house, then they should be free to do so. Thus, the land made available for rehabilitation must keep this in mind.

2. In the existing settlements, families from all economic strata stay together. They feel this need in order to keep the crew together as well as to be able to hire labour. This should be kept in mind, and hence the need to provide availability of options in terms of plot sizes.
3. The plot ownership formula should address several permutations of the people who are being resettled: plot owners with patta land, persons who were leasing land, persons who were renting structures, and persons who were squatting.
4. Allocate land for boats at the beach, place for auction of fishes, place for repairing the nets, and storage of equipment such as motors and nets. Adequate provision for these at the beach would mean less land is required in the housing area for these activities. Such a possibility has to be taken on a case to case basis with consultation with the community.
5. Street layout should be climatically appropriate to ensure ventilation and shading. The street, being an extension of the private space, is used for social interaction besides livelihood related activities.
6. Street layout should also be such that high speed winds during a cyclonic storm do not get enhanced to create damage to individual shelters.
7. The setback from streets should allow space for trees that will not only provide shade but will act as wind breakers.
8. Emergency access for fire engines/ambulances should be provided.
9. Adequate attention to solving the above issues would be crucial in proper relocation, and in ensuring that the existing areas on the beach are not reoccupied, wherever the settlements are being relocated.
10. We need to also recognize that there are both urban and rural situations, with local histories and peculiarities. These have to be kept in mind and flexibility provided in the policy.

C. Site Planning:

Minimum, Basic Requirements to be considered:

- Appropriate location at a safe distance and safe elevation, not in the natural or man-made drainage channel to the sea and/or in low laying area that is the natural or artificial water catchment area.
- Where there are no elevated sites closer to older villages, the possibility of raising the site needs to be looked into. At the least, it should be ensured that there are safe public buildings similar to the 'cyclone shelters' to take refuge in times of flooding. These could also double up as schools/PHCs.
- The location of the land should be such that the linkages for livelihood needs, social networks and primary/secondary economic networks are maintained and ensured.

- Being a coastal area, particular emphasis needs to be given to drainage. This is both in terms of sanitation to avoid stagnant water and in terms of draining rainwater/ floodwaters. Toilets/ solid wastes management also needs to take note of the high water table.
- Playgrounds for children need to be provided.
- Orientation with respect to sea: We must take into account wind and rain direction and build shelter dwellings accordingly. There is much to be learnt from the traditional buildings of the area. The way thatch roofs are anchored to the ground to take care of the winds/ and the good slopes provided to take care of intense rains from cyclonic storms is an example.
- If water supply is with ground water resources then the bore well location should be at least 30 mts/100 ft from any soak pit/septic tank, garbage collection points, composting areas, fish drying areas and land fills.
- Sewage treatment systems of decentralized nature should be used where the re-cycled water can be used for horticulture/vegetable gardens that can be part of income generation schemes.
- Roof water harvesting should be incorporated on plot level with rain water being lead to soak pits.
- Rain/Storm water drains should not be linked or combined with open sewage drains. The storm water drains should be connected to tanks or low lying areas to recharge of the water table.
- Electric lighting to be provided in public open spaces and community open spaces to allow livelihood activities to take place in the evenings.

D. Building issues:

- The concept of a core house of ---- sq ft. needs to be taken up. This will be a one room with toilet, water, electricity and a paved street access. There can be flexibility in the actual placing of this room within the plot. Clear building guidelines must be provided.
- Earthquake resistant features: Prof. Arya / CBRI (Central Building Research Institute, Roorkee) can be asked to recommend these, based also on local geo-hydrological context.
- Cyclone resistant features: Not more than G plus one; Roofs well anchored; **A ban on dangerous materials like corrugated Tin sheets which can fly in high winds and kill people.** (CBRI guidelines to be made available).
- Appropriate Technology: Ideally, these should not be thrust on the people and agencies should be encouraged to go for the Building Centres concept where the emphasis is on material banks, skill upgradation of local masons, local material wherever appropriate, local manufacturing of building requirements such as doors and windows. This will help generate new skills, as well as enable a revival of the local economy.
- Sensitising village level community workers on issues related to planning/ design/ options in house design and use of appropriate materials / information related to materials and financial inflows/ disbursement to make the process transparent. Institutions such as Auroville--Centre for Scientific Research, Habitat in Trivandrum, Inspiration of Ernakalum, Centre for Environment and Planning, Ahmedabad, Hunnarshalla-Foundation for Appropriate Building and Shelter Technologies-Kutch, ASAG-Ahmedabad and other such experienced

agencies in community planning and building technologies with disaster management experience could be invited to undertake this planning in different villages across the coastal belt.

- In case the permanent shelter is to be a core shelter, then the design should allow for easy expansion.
- The orientation and scale of the shelter should be climatically appropriate. (large over hanging eaves that are anchored for high speed winds with driving rains)
- Safety standards that are appropriate to the seismic category and cyclonic activity of the coast line must apply.
- If toilets and showers are not provided with the core shelter, then plot area should be such that the beneficiary can add them if they can at a later time.
- The core shelter should be built of materials that are appropriate to the climatic stress of the coast. Salt winds-Corrosion, hot-humid days-roofing that is self insulating, high wind speeds-low walls and steep roofs for wind buffeting actions.
- Hygienic standards within the shelter: adequate ventilation and natural day lighting.
- Design to have continuity to the vernacular layout of the affected shelters. Case studies of unaffected settlements and shelters to be done and used as starting points by the agency that would be facilitating the re-building.
- The construction techniques should be at par with the skills of the construction labor available in the area. This is important as the fishermen have an activity that does not allow re-building themselves so they will have to employ local labor.
- Kitchen/entry/courts should be incorporated according to the traditional pattern.
- Building materials used should allow easy maintenance. If materials that are introduced in the core shelters are not available locally to the beneficiary then expansion/repairs and maintenance will not be done by them when needed, leading to the deterioration of the shelter.

E. Guidelines for Re-location, Settlement Layout and Shelter Design submitted by Auroville Tsunami Relief Centre 13th Jan'05

A: - In case of the total or partial re-location of the settlements:-

1. The land should have safe elevation, not in the natural or man-made drainage channel to the sea and/or in low laying area that is the natural or artificial water catchment area.
2. The location of the land should be such that the linkages for livelihood needs, social networks and primary/secondary economic networks are maintained and ensured.
3. The environmental consideration like CRZ, annual climatic stress (cyclones, floods and tidal action) are taken into account so that the rehabilitation process is not repeated with the next natural disaster.

B: - House plots:-

1. Size of the plots should be appropriate to the traditional and livelihood needs.
2. If the resettlement plots are not compensation but part of the assistance package equity should be ensured to prevent social crisis.
3. The plots ownership formula should address several permutations of the people who are being resettled. (plot owners with patta land, persons who were leasing land, persons who were renting structures and persons who were squatting)

C: - Settlement layout:

1. Communal open space to integrate the storage of nets, ropes and spare parts.
2. Open and partially shaded space for drying of nets, repairs of boats/nets and repainting.
3. Street layout should be climatically appropriate to ensure ventilation and shading. The street being an extension of the private space is used for social interaction besides livelihood related activities.
4. Proper drainage slopes with solid waste collection points to ensure hygiene and sanitation.
5. Equity of access to open spaces within the hierarchy of street layout. No street should be more than 2 levels away to the common open spaces.
6. Street layout should also be such that high speed winds during a cyclonic storm do not get enhanced to create damage to individual shelters.
7. The setback from streets should allow space for trees that will not only provide shade but act as wind breakers.
8. Emergency access for fire engines/ambulances should be provided.

D: - Community infrastructure:

1. According to size of the population of the settlements community facilities like the following should be provided:
 - Primary schools
 - Health centre
 - Shop spaces
 - Community centre/ballade/marriage halls
 - Market platforms and auction sheds with electrification.
 - Cyclone shelters.

E:- Physical Infrastructure:

1. If water supply is with ground water resources then the bore well location should be at least 30 mts/100 ft from any soak pit/septic tank, garbage collection points, composting areas, fish drying areas and land fills
2. Sewage treatment systems of decentralized nature should be used where the re-cycled water can be used for horticulture/vegetable gardens that can be part of income generation schemes.
3. Roof water harvesting should be incorporated on plot level with rain water being lead to soak pits.

4. Rain/Storm water drains should not be linked or combined with open sewage drains. The storm water drains should be connected to tanks or low lying areas to recharge of the water table.
5. Electric lighting to be provided in public open spaces and community open spaces to allow livelihood activities to take place in the evenings.

F:- Individual Shelters: -

1. In case the permanent shelter is to be a core shelter than the design should allow easy expansion.
2. The orientation and scale of the shelter should be climatically appropriate. (large over hanging eaves that are anchored for high speed winds with driving rains)
3. Safety standards that is appropriate to the seismic category and cyclonic activity of the coast line.
4. If toilets and showers are not provided with the core shelter than plot area should be such that the beneficiary can add them if they can later.
5. The core shelter should be built of materials that are appropriate to the climatic stress of the coast. Salt winds-Corrosion, hot-humid days-roofing that is self insulating, high wind speeds-low walls and steep roofs for wind buffeting actions.
6. Hygienic standards within the shelter: adequate ventilation and natural day lighting.
7. Design to have continuity to the vernacular layout of the affected shelters. Case studies of unaffected settlements and shelters to be done and used as starting points by the agency that would be facilitating the re-building.
8. The construction techniques should be at par with the skills of the construction labor available in the area. This is important as the fishermen have an activity that does not allow re-building themselves so they will have to employ local labor.
9. Kitchen/entry/courts should be incorporated according to the traditional pattern.
10. Building materials used should allow easy maintenance. If materials that are introduced in the core shelters are not available locally to the beneficiary than expansion/repairs and maintenance will not be done by them when needed, leading to the deterioration of the shelter.