



Background Note

CRZ NOTIFICATION AND POST-TSUNAMI REHABILITATION AND RECONSTRUCTION **-- A zone of contention --**

The initial trauma of death and disaster unleashed by the tsunami has now given way to an urgent need for an effective programme of rehabilitation and reconstruction that is responsive to the long-term welfare of the affected people by minimizing their dislocation and impoverishment and at the same time not contradicting the existing legal norms and requirements. Hence it is essential to establish certain important and non-negotiable principles that will guide all the recovery and rehabilitation work:

- ◆ There should be no further victimisation of the tsunami affected.
- ◆ This disaster should not be converted into an opportunity to displace local communities living along the coast.
- ◆ A robust and sustained process of negotiation with affected communities under a clearly established and fully understood set of rules needs to be initiated immediately.
- ◆ A sustained, comprehensive and honest attempt has to be made to establish pre-tsunami socio-economic baseline.
- ◆ All attempts should be made to restore rights and entitlements due to the affected people so that their lives return to a minimum level of normalcy, which should at least be equivalent to the pre-tsunami situation.
- ◆ All actors, especially the government and NGOs, need to work with affected communities by fully involving them in decision-making and implementation of recovery and rehabilitation initiatives and not to drive the process merely by government orders.

In addition to the above mentioned principles it is essential to have a clear understanding and analysis of the Coastal Regulation Zone (CRZ) Notification. Given that knowledge and interpretation of the CRZ itself is as varied as the numerous amendments and that its application to the current situation veers from strict adherence to relaxations on a case by case basis, it is vital to review the facts with some degree of precision and clarity.

The (CRZ) Notification, issued in 1991 using the provisions of the Environment (Protection) Act, 1986 and the Environment (Protection) Rules, 1986 is the most significant and specialized legislation guiding anthropogenic activities along the coast. The crux of the Act and its Rules is that it empowers the Centre [read Ministry of Environment and Forests (MoEF)] with substantial power to take action *“for the purpose of protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution.”* This includes the power to delineate areas where anthropogenic activities can be regulated and restricted.

CRZ Notification: Jurisdiction and activities

- The CRZ covers the coastal stretches of India's mainland and the many islands including Andaman and Nicobar Islands and Lakshadweep.
- It sets limits to the area under its purview to comprise coastal stretches of seas, bays, estuaries, creeks, rivers, and backwaters which are influenced by tidal action (in the landward side) up to 500 metres from the High Tide Line (HTL) and the land between the Low Tide Line (LTL) and the HTL.
- The 500-metre CRZ boundary is drawn at a radial distance (as the crow flies) uniformly from the HTL and runs parallel to the coast.
- The 500 metre boundary does not take into account height of hillocks, promontories or cliffs on the coast. The MoEF recognizes this and where such elevations are included, the CRZ continues several metres beyond these physical features (which are over 500 metres in height).
- In the case of rivers, creeks and backwaters the CRZ would apply to both banks of the water body, but the distance from the HTL may be reduced on a case-by-case basis which would be recorded in the Coastal Zone Management Plan (CZMP) of that State. However, the distance is not to be less than 100 metres or the width of the river whichever is lesser.
- The jurisdiction of the CRZ Notification is also defined by the nature of activities it regulates or restricts in the zone such as "*setting up and expansion of industries, operations or processes etc*" It does not issue a blanket ban on all activities but lists activities restricted and some that are permitted.

The entire CRZ area is classified as CRZ I, II, III and IV depending on its geomorphology and existing settlement characteristics: -

- **CRZ-I (i)** comprise areas that are ecologically sensitive such as national parks, sanctuaries, wildlife habitats, mangroves, coral reefs, areas close to breeding and spawning grounds of fish and other marine life ; areas of outstanding natural beauty/heritage areas ; areas likely to be inundated due to rise in sea level resulting from global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/Union Territory level from time to time.
- **CRZ-I (ii)** those areas lying between the Low Tide Line and the High Tide Line.
- **CRZ-II** areas already developed up to or close to the shoreline. This refers to areas within municipal limits or in other legally designated urban areas provided with drainage, approach roads and water supply etc.
- **CRZ-III** areas which are relatively undisturbed and do not belong to either CRZ I or II. These include coastal zone in rural areas (developed and undeveloped) and those within municipal limits or in legally designated urban areas that are not substantially built up.
- **CRZ-IV** those coastal stretches in Andaman & Nicobar, Lakshadweep and small islands, except those designated as CRZ-I, CRZ-II or CRZ-III. None of the small islands on the Tamil Nadu coast are classified as CRZ-IV

Several NGOs have alleged that most State CZMPs have classified the CRZ areas incorrectly. The MoEF has directed reclassification in certain areas of Tamil Nadu and the Tamil Nadu State Government is in the process of doing so.

The responsibility of implementing the CRZ Notification rests with the State Governments and the MoEF. On 26 November 1998, the MoEF constituted 13 State Coastal Zone Management Authorities (SCZMAs), one for each of the coastal states and Union Territories and a National Coastal Zone Management Authority (NCZMA) to monitor and implement the provisions of the CRZ Notification.

The SCZMAs have a fairly extensive and important mandate, empowered to “take action and issue directions”. They can identify ecologically sensitive and economically important areas, implement all provisions of the CRZ Notification including recommending projects for clearance to the government.

The tenure of the Tamil Nadu SCZMA was extended by three years on January 4, 2002. Point VIII of the notification states that the SCZMA is responsible for examining all projects proposed in the CRZ areas and it has to give its recommendations before the project proposals are referred to the Central Government or agencies entrusted to clear projects under the CRZ Notification. Point IX of the notification states that the SCZMA shall ensure the compliance of all specific conditions that are stipulated and laid down in the approved CZMP of Tamil Nadu. It is clear that the Tamil Nadu SCZMA is the designated authority mandated to legally oversee the regulation of specific activities mentioned in the notification, in the CRZ areas. For the monitoring of compliance and implementation of the notification, it is necessary that the Tamil Nadu SCZMA is an officially functional body. Ironically, just after the devastating event of the tsunami, the term of the Tamil Nadu SCZMA and those of the other states has expired on January 4, 2005. It is now more than a month since the term has expired and longer since the tsunami hit the coast, but the MoEF has not yet renewed the tenure of these authorities.

Problem areas

While the CRZ Notification was one of the earliest specialized environmental legislations, 14 years later, several problems have crept in and serious problems exist with its implementation. Some of them are:

- Since 1991, there have been 19 amendments and around 3 corrigenda (up to 24th July 2003) to the provisions of the Notification. Each of these amendments dilutes and introduces newer clauses that complicate and render many of the protective clauses meaningless.
- The MoEF has still not issued a consolidated gazetted notification incorporating all the changes to the original notification making the interpretation of the various clauses a real challenge.
- The series of amendments to the notification have made way for several industrial and large-scale commercial activities on the coast. But none of the amendments have sought to clarify some of the other ambiguities and uncertainties such as the definition of ‘local inhabitants’, ‘traditional rights and customary uses’.
- Although the States were supposed to prepare their CZMPs before February 1992, they only submitted the CZMPs after being directed to do so by the Supreme Court in 1996.
- While the MoEF has only conditionally approved them, none of the States have incorporated the conditions and are yet to prepare a revised CZMP. In the case of Tamil Nadu, the CZMP is not fully approved. The MoEF has approved only 10 out of the 31 maps developed for the Tamil Nadu coast.
- As the term of the Tamil Nadu SCZMA has not yet been renewed, strictly speaking the rehabilitation and reconstruction within the CRZ cannot take place legally, leading to unwitting violations of the law and creating the potential for future litigations on this matter.
- The HTL and LTL are to be demarcated only by authorities designated by the Central Government but the GoI is still in the process of arriving at a common methodology for HTL/LTL demarcation.
- In none of the states has the HTL demarcation exercise been done at the ground level. The MoEF directed the TN Government to “*delineate LTL, HTL, 200 metres, 500 metres lines and other relevant lines in respect of creeks, backwaters and rivers affected by tidal action so that distances can be measured, whenever required.*” The demarcation of the HTL has only taken place on the ground level for the stretch between Chennai city and Mahabalipuram. For the remaining 920 odd kilometres of coastline in the State, the HTL and other lines remain unmarked at the ground level.

Coastal activities and settlements

Traditional fishing communities depend on marine resources and beach space to carry out important activities such as storing their boats, nets and drying fish. In some parts of the coast, fishers construct temporary fishing shelters to store their boats or to guard their expensive gear and craft. The introduction of more expensive fishing crafts, like Fibre Reinforced Plastic (FRP) and the lack of facilities for guarding and mooring crafts are pushing fishers closer to the shore.

There are other inhabitants of the coastal zone, who are not dependent on the resources of the coast for their livelihoods, but who may have inherited or acquired rights over coastal lands and who possess land titles and records.

The CRZ Notification was an attempt to balance this need to inhabit coastal areas and the need to protect the coastal eco-system from haphazard development. The Notification certainly permits human habitation within the 500 metre zone, with specific conditions in the various CRZ areas.

In its list of prohibited activities, there is absolutely no mention of any blanket ban on the settlement of coastal communities within the 500 metre zone. Nowhere in the sections on Prohibited or Restricted activities is there any mention of the fishing activities including drying of fish, storing of boats and fishing equipment in temporary sheds.

The CRZ Notification either *extinguishes* the rights of persons to carry out activities in certain areas (like in CRZ –I areas) or it *restricts* their rights to carry out activities (e.g the building regulations in CRZ –II and III). In view of this understanding, fishing activities and fisher settlements are permitted in the Notification. Activities related to marine fishing should be considered as activities requiring foreshore and waterfront facilities. The notification states that clearance can be given for activities if they absolutely require waterfront and foreshore facilities.

CRZ – I:

The Notification states that there shall be no ‘new constructions’ in the CRZ-I areas. The definition and interpretation of the term ‘new construction’ is important, although not explicitly stated in the notification.

The expert legal view is that there is a difference in the interpretation of the words ‘no construction’, ‘no new construction’ and ‘no reconstruction’. The term ‘new construction’ need not apply to the reconstruction of an earlier authorised structure that was demolished or destroyed by the tsunami, if it is being reconstructed (as part of rehabilitation measures) provided the reconstructed structure is as per the same specifications, style and design as the earlier construction. There should be no increase in the area occupied or in the height of the construction as earlier.

This throws up several practical problems. There are no records available for several earlier constructions and it is also likely that a reconstruction will have different impacts on the environment than the earlier one, particularly if it is constructed using certain kinds of building materials.

Most importantly, the situation then and now (post-tsunami) has changed drastically, where safety of constructions and design are much more important.

The CRZ does not address any of these issues at present since these were simply not matters envisaged during the drafting of the notification.

The Notification is clear that no new constructions can be allowed within 500 metres of the CRZ – I areas. This would include all new residential homes, temporary settlements, permanent structures, recreational facilities, cyclone shelters, public infrastructure

facilities such as roads, bridges, schools, playgrounds, parks, medical facilities, hospitals and health centres, shops etc.

CRZ – II:

Within the CRZ –II areas, there are more relaxations for construction and all activities in general.

- Buildings can be constructed only on the landward side of the existing road (or roads approved in the CZMP).
- Buildings can be constructed only on the landward side of existing authorized structures (that which is adjoining or nearest to the proposed construction). It is sometimes wrongly interpreted that construction is possible in all areas on the landward side of any authorized structure that is closest to the shoreline along the stretch of the coast.
- These buildings shall be subject to the existing local Town and Country Planning Regulations including the existing norms of Floor Space Index/Floor Area Ratio (FSI/FAR).
- Buildings will not be permitted on the landward side of new roads (other than those approved in the CZMP) if these new roads are constructed on the seaward side of an existing road.
- The above regulations will not apply to approved housing schemes of State Urban Development Authorities, if at least one phase of the construction commenced prior to February 19, 1991. However, MoEF approval would be necessary for the same.

It should be noted that the notification states that permission shall be given only for activities that primarily require foreshore or waterfront facilities. The notification provides explicit building regulations including locations for these buildings. However, for activities that are permissible in the notification and those requiring foreshore or waterfront facilities, no specific location is mentioned in the notification, unless these activities involve the construction of structures that can be defined as 'buildings'.

CRZ – III:

The area up to 200 metres from the High Tide Line is to be earmarked as a 'No Development Zone' (NDZ). Within the NDZ, the following regulations exist:

- No construction is possible in this zone unless it is repair of existing authorized structures.
- Activities related to agriculture, horticulture, gardens, pastures, parks, play fields, forestry, salt manufacture from sea water, facilities for generating power by non-conventional energy sources, weather radars, mining of rare minerals etc may be permitted.
- Construction of dispensaries, schools, public rain shelters, community toilets, bridges, roads and provision of facilities for water supply, drainage, sewerage which are required for the local inhabitants may be permitted, on a case to case basis, by the MoEF or the SCZMA.
- The construction of units or structures for domestic sewage treatment and disposal is permissible.

For the remaining areas of the CRZ –III, in the region between 200 and 500 metres from the HTL the following construction related activities are permitted:

1. Hotels and beach resorts for tourists and visitors according to certain guidelines in designated areas and with prior approval of the MoEF.
2. Construction or reconstruction of dwelling units if they are i) within the ambit of traditional rights and customary uses such as existing fishing villages and *gaothans*; ii) the total number is less than twice the number of existing units; iii) covered area on all floors of the dwelling unit does not exceed 33 percent of the plot size; iv) the overall height does not exceed 9 metres v) it is not more than 2 floors (ground floor plus one).

Disaster mitigation concerns

Rehabilitation efforts should now do a thorough multi-hazard vulnerability analysis and design to protect coastal communities from the impacts of future extreme natural events. The Environment Protection Act and the CRZ Notification were both issued by the Central Government in recognition of the fragility and sensitivity of the environment. But 19 major amendments have introduced several relaxations for industrial activity and activities that really do not require the foreshore and the waterfront in order to be carried out. These include Nuclear Power installations, Information Technology industries, Special Economic Zones etc.

As a result of poor implementation of the CRZ Notification, several sensitive coastal features such as mangroves, coral reefs and sand dunes have been destroyed. While it is still debatable whether these features would actually provide protection from a force as large as a tsunami, reports from various areas suggest that mangrove forests, large sand dunes and

some times even old forest plantations have been able to provide some measure of protection, perhaps by providing a buffer against strong winds and breaking the velocity of the waves.

While the scale of human tragedy is unquestionable and evident, the impacts on the ecosystem are still largely unknown. The coastline is a dynamic area and significant human activity in this area could result in devastating environmental impacts. Seawalls and groynes would exacerbate erosion problems in the coast. It has been established that they interfere with the natural movement of sand particles causing erosion in other areas of the coast. This also prevents important ecological events such as the nesting of turtles on beaches, besides restricting human access to the inter-tidal zone.

Reconstruction and Rehabilitation – Action Points

Steps to determine CRZ Categories for rehabilitation

1. A list of coastal villages affected by the tsunami must be identified.
2. The maps from the Tamil Nadu CZMP for these villages needs to be located and checked to see if they have been approved by the MoEF or not.
3. In instances where these maps have been approved, the Survey Numbers and corresponding CRZ category must be circulated to all Government officials present in these regions, NGOs, *Panchayat* members and others currently engaged in rehabilitation efforts. Copies of these must be made available for distribution at the offices of the District Collector, at the village land records offices and *Panchayat* offices.

In the event that the CRZ zones for these villages has not yet been approved by the MoEF, the Field Team on the CRZ Notification and Rehabilitation must carry out an identification exercise to assist the State Government in determining these areas.

Constitution of Field Team on CRZ Notification and Rehabilitation

1. The goal of this Field Team on CRZ and Rehabilitation should be to carry out the ground verification of coastal geomorphologic characteristics of the relevant coastal villages against the information provided in the CZMP maps for these areas.
2. This Field Team should comprise lawyers with a good knowledge of the CRZ Notification; NGO representatives; officials deputed by the State Government; members of the CZMA and representatives/ officials of rehabilitation programmes; ecologists; social scientists and a GIS expert.
3. The Field Team should use the characteristics given in Para 6(1) of the CRZ Notification and the conditions given in the MoEF's letter to the State Government dated September 27, 1996 to identify the various categories of the CRZ.

4. The Field Team should have the autonomy to decide on its manner of functioning and may adopt methods that are most suited for the achievement of its aims. This can include training of volunteers, creation of special teams for ground verification, consultations with local communities and the conduct of meetings.
5. The team should also collate information on available Government revenue lands where construction of shelters is possible, based on the conditions and norms of the CRZ Notification and the MoEF's directions.
6. The team should also identify the High Tide Line and other distances of the CRZ to be demarcated on the ground in these areas.
7. The report of the Field Team should be open to inspection and it must be made publicly available on the website of the Government of Tamil Nadu inviting suggestions and comments.
8. The Field Team should submit its report at the earliest possible date incorporating the suggestions and comments from the public and it should provide support information to the Technical Group for Rehabilitation.

Constitution of Technical Group for Rehabilitation in Tamil Nadu

1. The Responsibility of the Technical Group should be to identify suitable and appropriate building technologies, designs and integrated settlement designs for the affected areas of the Tamil Nadu coast in consultation with the affected coastal communities.
2. The Technical Group should comprise an inter-disciplinary team of experts from various sustainable building and appropriate building institutions, experts from bio – developer groups, and representatives from the NGO Coordination / Resource Centres, ecologists, social scientists, disaster management experts, organisations such as INTACH who have developed rehabilitation planning guidelines and principles etc (This is only an indicative list and not complete).
3. The Technical Group should involve local fishers and other coastal communities in developing designs such that these structures are appropriate to their cultural and lifestyle needs.
4. The participatory process undertaken by the Technical Group should also be extended to cover the post rehabilitation scenario and put the community in charge of maintenance and upkeep, which is often a grey area in public projects.
5. The Technical Group should collect and incorporate data from reports on past/recent cyclonic events and other such relevant data, to assess beach dynamics and appropriate settlement designs, from the point of view of disaster management/mitigation.
6. The Technical Group should develop building norms and designs for both individual residential constructions as well as for the design, rebuilding and integrated rehabilitation of the affected communities.
7. The Technical Group should pay special attention to life-styles and occupational needs especially in the areas of housing, infrastructure, utilities and distribution of shared spaces.
8. The Technical Group should also focus on the restoration of ecological features of the coast, where appropriate and shall build in the components of coastal protection using sustainable and ecologically appropriate technologies and designs.
9. The Technical Group should also undertake a Review of the Amendments to the notification with a view to strengthening the protective clauses of the notification, keeping in mind future disaster mitigation concerns.
10. The Technical Group must be supported by the Tamil Nadu Government in undertaking a demonstration of integrated rehabilitation measures in select villages.

Note to Editors:

Drawing on the UN System's experience in Orissa in the aftermath of the 1999 super cyclone and in Gujarat following the 2001 earthquake, the UN's contribution in Tamil Nadu and other tsunami affected States is to mobilize resources for the rehabilitation and reconstruction phases.

Working with the poor and marginalised communities, the focus of the UN is to facilitate the rapid recovery of the affected populations in a way that leads to the sustainable reduction of disaster risks and expands the opportunities for development. It also ensures the mainstreaming of issues pertaining to long term vulnerability reduction, sustainability and environmental conservation.

Website : <http://www.un.org.in>

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