Coastal Zone Management Notification '07

Better or bitter fare?

A critique by

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Background events leading to the draft CZM Notification, 2007

The Indian coastal stretch is made up of diverse ecosystems - sand dunes, beaches, wetlands, mangroves, estuaries, backwater lagoons and coral reefs. Settlements of nearly 10 million fisherfolk, are concentrated in these areas, as they mainly depend on coastal resources and the sea for their survival. Several activities such as unregulated tourism, polluting industries, infrastructure, aquaculture, sand mining, construction of sea walls & rapid urbanisation pose serious threats to the health of these ecosystems and to lives and livelihoods of coastal communities.

The coast is governed by several official legislations that regulate 'development' activities including construction, industrial activity and coastal infrastructure. Some of these legislations have an explicit mandate to protect the coastal ecology and available natural resources of the region. Other laws govern the establishment of projects and schemes to use these resources for the growth of the local and national economy. One such protective legislation is the CRZ Notification that was promulgated in 1991 using the provisions of the Environment (Protection) Act, 1986 and the Environment (Protection) Rules, 1986. Through such a notification, the coastline of the country was identified as an ecologically sensitive area, where development activities were regulated.

The CRZ Notification was introduced with three main principles:

- It is necessary to arrive at a balance between development needs and protection of natural resources.
- Certain activities are harmful for both coastal communities and their environment, and these should be prohibited or regulated.
- If coastal ecosystems are sustainably managed, then the livelihoods of millions will be protected and their survival guaranteed.

The implementation of this central notification was by and large ignored by many state governments. Vested interests from various lobbies such as the tourism and industry have constantly sought to get rid of this notification. The CRZ Notification has been amended at least 19 times, and each dilution rendered the law more impotent. The 26 December 2004 Indian Ocean tsunami starkly demonstrated the impact of this gross neglect.

The Swaminathan Committee review of the CRZ Notification

Even prior to the tsunami, a process had been undertaken by the Ministry of Environment and Forests to reform environmental regulations. These included the promulgation of a National Environment Policy, the reengineering of the environment clearance process and the establishment of the M.S Swaminathan Committee to review the CRZ Notification and suggest changes for a new legislation. The Swaminathan Committee, headed by Prof. M.S. Swaminathan was constituted in July 2004 with the mandate to suggest an appropriate framework of coastal management. The report of the committee was submitted to the MoEF in February 2005.

The minutes of the meetings of the Swaminathan Committee makes reference to several activities that have been responsible for destroying coastal areas and also affecting the livelihoods of fisher communities, such as sand mining and sea walls. On comparing the minutes of the meetings to the

suggestions in the final Swaminathan Report, one sees that several suggestions made in the committee meetings don't match with the final recommendations of the final chapter of the Swaminathan Report.

The entire process of review of the CRZ Notification by the Swaminathan Committee was criticised because it was devoid of the participation of public interest groups or coastal communities. The meeting minutes and reports of the committee remained out of public access until an application under the Right to Information Act was filed seeking this information.

While the Swaminathan Report provides an alternative structure for coastal management, it does not really tackle the problems with the exiting notification, which is presently in force. One of the important concerns with the present notification is that it has been severely violated and no action has been taken on the said violations. Irrespective of whether a new amendment/notification is introduced or not based on the Swaminathan Report, the earlier violations of the CRZ Notification cannot be overlooked. The final chapter and annexes of the Swaminathan Committee report suggested a new legislative framework for coastal management. It is from this initial suggested framework that the present draft Coastal Zone Management Notification, 2007 was developed by the MoEF.

The Indian Ministry of Environment and Forests is planning to promulgate a new law titled the Coastal Zone Management Notification. This draft notification was obtained from informal sources by citizens groups working on issues of coastal environment and livelihood conservation. It is controversial and proposes to undo the existing Coastal Regulation Zone Notification, 1991 which citizen groups have fought hard to implement. This attempt to deflect from environmental regulatory frameworks through the CZM Notification is clear and will have serious social and environmental concerns. Is the proposed CZM Notification designed for better coastal management? What evidence exists to show that conservation and sustainable livelihoods are the objectives of this law? This paper examines the content and process behind this new law to reveal concerns with the intent of this law.

Critique of the Draft Coastal Zone Management Notification, 2007

The first law for coastal protection – promises undelivered

The Coastal Regulation Zone Notification that was brought into force in 1991 by the Ministry of Environment and Forests (MoEF) under the Environment Protection Act, 1986 was hailed as a progressive law by fishworkers and environmental groups as it recognised that coastal areas needed some form of protection from unregulated development. This notification also appreciated and prioritised the rights of traditional coastal and fishworker communities on coastal spaces as their livelihood security depended directly on their free access to these spaces. The popularity of the notification in its original form is evident in the fact that different constituencies mentioned above claimed that the notification had been brought into force as a response to their advocacy efforts at local, regional and national levels (Menon and Sridhar, 2007).

However, the run-in period of the CRZ Notification synchronised with India's economic reforms and this had a big influence on the implementation of its original objective. The clauses of the notification prohibiting and restricting activities along the coast remained unimplemented, the mandatory Coastal Zone Management Plans that were to be prepared to ensure that sensitive areas were protected did not materialise and there was no institutional mechanism to ensure implementation (Menon and Sridhar, *ibid*). The Supreme Court of India took strong objection to the inaction on CRZ implementation as early as 1996 (Anon, 1996). Several committees were set up by the MoEF to review various aspects of the notification but they mostly recommended the dilution of the notification allowing commercial interests such as tourism, sand mining and infrastructure projects to exploit the coast. The most striking example is that the original law envisioned permitting only activities requiring the waterfront or foreshore in the CRZ area, but each dilution permitted new industries (not necessarily 'coastal' in nature) into this sensitive zone (Goenka, 2000; Divan and Rosencranz, 2001; Upadhyay and Upadhyay, 2002; Sridhar, 2005). The few progressive recommendations of these committees were never adopted or acted upon by the MoEF (Sridhar et al, 2006). In effect, 16 years of active collusion between commercial interest lobbies and the government ensured repeated dilutions to this law and total non-implementation of its regulatory procedures compromising its primary objectives.

Proposed Coastal Zone Management Notification: Flawed premise

The MoEF plans to introduce a new notification replacing the CRZ Notification (Bhalla, N. 2007; Sethi, 2007). The proposed Coastal Zone Management (CZM) Notification is presumably based on the recommendations of the Swaminathan Committee which the MoEF set up in 2004 to review the CRZ Notification. Although the Swaminathan Committee was purportedly set up to infuse better science into the law and devise regulations for coastal conservation and livelihood needs, it fell short on many counts. The most strident criticism of this committee has been that the regressive regulatory framework suggested in the final chapter and annexes of its report is completely antithetical to the initial chapters that outlined principles of integrated coastal zone management (Sridhar et al., 2006).

The two main premises the MoEF puts forth for promulgating the CZM Notification are contested below:

A. *There have been several amendments to the CRZ Notification, 1991 based on recommendations of various committees, which are consistent with the basic objective of the notification, but there were continued difficulties posed by the CRZ Notification in its effective implementation* (para 2 of the CZM Notification).

The first is a completely a false premise and a justification that the MoEF seeks to hide behind for its complete failure in implementing the CRZ Notification. This is illustrated by the following facts:
1. The CRZ Notification per se did not pose problems in implementation compared to the lack of willingness to implement it. This draft notification wrongly states that all the amendments were for better implementation of the CRZ Notification. The MoEF seeks to negate its own role in introducing these amendments and the negative impacts these amendments eventually had on the original intent of the law. These repeated amendments rendered the notification difficult to comprehend, self contradictory and very confusing. A detailed analysis of each of the amendments to the CRZ Notification is available in Menon and Sridhar, 2007.
2. Contrary to the MoEF's claim, most amendments made at the behest of specific committee recommendations, were only related to the needs of specific sectors such as tourism or urban development rather than sustainable and environment friendly coastal development.
3. None of these committee reports were drafted through a participatory process, as claimed by the MoEF.
4. Of the 19 dilutions that were brought in through amendments, only 3 were put out for public comment before finalisation and in response to this citizens and groups warned against problems that finally did materialise.
5. What the proposed CZM Notification does in actuality is to build on and strengthen the dilutions and amendments to the CRZ Notification which rendered it ineffective in the first place. The numerous suggestions on institutional arrangements for effective implementation, recommendations for strengthening the clauses of the CRZ Notification presented at each instance of amendment to the MoEF by research groups, activists and even judicial orders have been disregarded by the MoEF in this proposed legislation.

B. *The CZM Notification is proposed as a replacement for the CRZ Notification based on the recommendations of the Swaminathan Committee's Report which contained recommendations to build on the strengths of existing regulations.*

This second rationale for promulgating the CZM Notification is misleading since the Swaminathan Committee Report is not a widely accepted document devoid of controversy. It fell short on several counts and was far from being a document that contained recommendations on all aspects mentioned in Para 4 of the CZM Notification[1]. The absence of any participation of citizens groups in its drafting has been a serious concern since its objectives had far reaching implications.

The pro-industry influences were evident in the Swaminathan Committee Report. The initial discussion chapters on integrated coastal zone management and the final chapter containing the regulatory/management recommendations were completely disjoint (Sridhar et al. 2006). The various committee meetings and even the initial chapters of the Swaminathan Report recognise the poor implementation of the CRZ Notification but no effort was made to resolve any of these concerns, including legal issues like existing violations.

[1] The CZM Notification states that the Swaminathan Report's recommendations were aimed at protecting coastal populations and structures from the risk of inundation due to extreme weather and geological events while ensuring that the livelihoods of coastal populations are not unduly hampered (Para 4).

There were however some positive recommendations within the Swaminathan Report that could be used to strengthen the CRZ Notification such as revising the kinds of activities that are to be permitted, regulated and prohibited on the coasts[2]. Even if the recommendations of the Swaminathan Report compelled the MoEF to draft a completely new notification, this version of the CZM Notification diverges significantly from the principles laid down in the Committee Report. For example, the Swaminathan Report cautioned against choosing 'hard engineering options' such as sea walls as coastal protection measures and identified these as being serious threats to the stability of coastal ecosystems and livelihoods[3]. The CZM Notification, however, hinges the entire CZM II management regime on sea walls (See point 4 of the CZM Notification on Categorization of the Coastal Zone).

Objectives of the CZM Notification: Reading between the lines

The proposed CZM Notification is yet another example of the MoEF's 'double speak' on environment issues and recent policy/legal reforms. The notification espouses politically correct objectives - 'sustainable development', 'sustainable livelihoods' and 'conservation of ecologically and culturally significant coastal resources'[4] but the subsequent clauses contain no indication of how these objectives will be achieved. On the contrary, the clauses of this proposed notification are cleverly drafted to actually prevent such objectives from materialising. Juxtaposed with the 'reengineering' of other environmental legislations, the notification's regular allusion to the controversial and much criticised National Environment Policy affirms its true purpose (For critiques of the NEP see Kothari, 2004; Open Letter, 2004; Upadhyay, 2004; CSS, 2004; TBS, 2004a; TBS, 2004b; TBS 2004c; Ghotge, 2004; Lele and Menon, 2005). All told, the CZM Notification presents itself as a brazen attempt at disempowering fishworkers and traditional coastal communities, and making available 'premium' lands in coastal areas to commercial interests by dismantling all protective and regulatory mechanisms that can restrict unplanned development.

We examine the various clauses to see how they are antithetical to the stated objectives of A) conservation, B) sustainable livelihoods and C) sustainable development that it is supposedly based on. A comparison is also made with the initial CRZ Notification to see if the CZM Notification scores above the earlier notification or whether it is indeed more regressive in realising such objectives.

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[2] See Swaminathan Committee Report, page 99, section 4.1.3 "To revisit the CRZ Notification, 1991 and recommend necessary amendments to make the regulatory framework consistent with recommendations on …and the Environment (Protection)Act, 1986."

[3] See Swaminathan Committee Report, page 68, section 2.8.1 which is on 'coastal erosion' and states "Over a period, it has been concluded that there is more harm done to the coast by these seawalls, since they disturb natural sediment budget, which leads to erosion in adjacent coastal areas. Soft engineering measures such as coastal vegetation, beach nourishment, etc. are preferred for coastal protection". Other sections discouraging hard engineering options and sea walls are page 48, section 2.5.1.2 ; page 64, section 2.7.4; page 82, section 3.4.9; and page 114, Annexure –V.

[4] See Pt 2 on Objectives of the CZM Notification 2007

A. Conservation design of the CZM Notification

The conservation design of the notification is similar to the CRZ Notification, but varies in the degree of regulation of activities. The CZM Notification attempts to delineate areas as Coastal Zone Managment (CZM) I, II, III and IV zones and establish different ways of managing activities here.

Protection and Conservation of Ecologically Sensitive Areas

One of the criticisms of the CRZ Notification was that it used terms that were not adequately defined. However, the CZM does no better in this respect. While there is extended hair splitting over terms such as 'professional' and 'expert', important operational terms such as those of habitats that will eventually be categorised into particular zones are left open. Without clear definitions, the CZM I areas cannot be clearly identified or protected. For example, CZM I is to comprise of ecologically sensitive areas such as mangroves and sand dunes. Unless these are further defined quantitatively (size, area etc), and qualitatively (characteristics, functions), it will be impossible to carry out any protection for these critical ecosystems. It should also be stressed here that these very same ecologically sensitive areas are responsible for key ecosystem services and that the health of these habitats is directly liked to the productivity of the fisheries and livelihoods in these and surrounding areas. Better protection and conservation to these areas would mean a more productive fishery and also ensure long-term livelihood security for fishing communities.

Ironically, a qualification accompanies the management of these ecologically most sensitive CZM –I areas. The protection and conservation of CZM I areas is subsumed by development and economic considerations as protection measures for CZM I will be undertaken subject to "technical feasibility and costs" and only if consistent with the provisions of the National Environment Policy (NEP). The NEP which was finalised in 2006 clearly states that it is drafted in line with the recommendations of the Govindarajan Committee Report on Investment Reforms. Critics of the NEP argue that under the garb of safeguarding livelihood and development concerns, the NEP actually dilutes environmental regulations to promote industrial development.

CRZ I areas under the CRZ Notification were initially defined as areas where no activities would be permitted until several dilutions were introduced to change that. The proposed CZM Notification builds on this regressive trend and establishes that various activities will be allowed in these sensitive ecosystems as long as they are recorded in the 'Integrated Coastal Zone Management Plans' (ICZMP). The definition, criteria, guidelines and scope of such ICZMPs are not elaborated in the notification and neither are there any rules or parameters for who should prepare ICZMPs.

B. Sustainable development and the CZM Notification

There is no operational definition of the term 'sustainable development' anywhere in the CZM Notification. Appendix III of the proposed CZM Notification contains an assorted listing of various 'areas of particular concern' that are identified as CZM II areas. These are the areas prioritised for development – the only evidence available for the MoEF's description of sustainable development on the coast. Typically, the constituents of this list are those which are currently subject to prohibitions or restrictions in the CRZ Notification. These areas such as Special Economic Zones and Notified Tourism Areas presently pose significant threats to coastal ecosystems and will continue to do so in future. They stand to gain immensely by their presence on this list as CZM II areas will hardly feel the regulatory pressures from the notification.

The management mechanism within the CZM II areas makes little conservation sense. The two management choice offered by the notification – Options A and B (A being for areas not covered by coastal protection structures and B for areas covered by coastal protection structures) are presented as equal options but there are huge differences in their ecological and social ramifications. The socio-political and economic context at the local and national levels will also predetermine the option that will be chosen in almost all cases. The management measure states that activities and constructions that lie behind coastal protection structures (largely sea walls) or Setback lines will not be subject to any regulation. Only activities on the seaward side of setback lines will be subject to regulations and this has major implications only for coastal communities such as fisherfolk. CZM II offers Local Authorities an option of choosing setbacks or sea walls as their management strategy. What this translates into is that CZM II areas will not be affected by regulations of the notification if these areas are sea-walled. The availability of options on how to manage CZM II areas will most certainly result in the walling of most of India's coastline without an objective consideration given to softer options for coastal protection. It is now being widely acknowledged that many of these hard options have serious ecological and environmental impacts (Hedao, 2005). Sea walls do not prevent erosion, they only transfer the problem elsewhere on the coast (Bhalla, 2006; Bhalla 2007). Experts (including coastal engineers) have repeatedly stressed that all hard options should be viewed as a last resort when all other measures are not likely to be effective (Sannasiraj, 2006).

Setback lines

Within CZM II and III, activities which do not require shoreline access can be set up beyond a setback line. The setback line is based on the mapping of coastal vulnerability to 'natural and manmade hazards'. There is no indication if this setback line will be constant or dynamic, or a clear time frame to map the same. Ironically, many of the shore-front activities permitted in Appendix-V of the Notification as well as the construction of coastal protection structures such as seawalls (Management Option B for CZM –II areas) can have significant impacts on the hazard risk and vulnerability of neighbouring areas and hence on their setback lines as well. To illustrate, there are several obvious and significant shoreline changes in neighbouring areas as a result of the construction of ports, harbours and breakwaters (Pandian et al. 2004; Mani, 2004) Thus, permitted activities from time to time will change vulnerabilities and therefore setback lines. Even then, it is not clear how the mechanism of zonation will operate with a fluctuating setback line.

Importantly, there is the central question of whether the concept of setbacks alone provides any protective function at all, considering that several activities are allowed on the seaward side and all activities can take place unregulated on the landward side.

Inaccurate interpretation of 'vulnerability'

The use of the word 'vulnerability' is not defined in the draft and the current description in Appendix –I is actually inaccurate. The right term to be used is a hazard line based on a given risk.[5] Vulnerability is the '*level of exposure of human life, property, and resources to impact from hazards'* and is derived by calculating a certain defined level of risk to coastal hazards.[6] Hazard is defined as *'an event or physical condition that has the potential to cause fatalities, injuries, property damage, infrastructure damage,*

[5] See NOAA Vulnerability Assessment Techniques and Applications (VATA) website glossary, available at http://www.csc.noaa.gov/vata/glossary.html and NOAA Risk and Vulnerability Assessment Tool (RVAT) available at http://www.csc.noaa.gov/rvat/glossary.html

[6] NOAA. 2006. Vulnerability Assessment Techniques and Applications, see http://www.csc.noaa.gov/vata/intro2.html

agricultural loss, damage to the environment, interruption of business, or other types of harm or loss'[7] and risk is defined as *'the potential for losses associated with a hazard, defined in terms of expected severity and/or frequency, and locations or areas affected*'.[8]

Thus, what the draft claims as a ' vulnerability map' is actually a hazard risk line, risk being defined by the notification as '*based on coastal hazards with a one percent (1%) probability of occurrence in any given year, after accounting for the median estimates of mean sea level rise and horizontal shoreline displacement in the next one hundred (100) years.'*

Thus, only when one overlays exposure of human life i.e. population density, existing property, and resources with the hazard risk line does one get a vulnerability map. This glaring conceptual error in a proposed legislation that claims to incorporate scientific principles for coastal management indicates its intent to obfuscate issues.

The six listed parameters for the hazards risks (a.k.a 'vulnerability mapping') are actually incomplete. The first prominent parameter which is missing is the geology that 'identifies the rock types for all coastal segments'.[9] This is one of the major factors that determines impacts of hazards such as a tsunami (along with the bathymetry). The other important parameters omitted are wind speeds and data on extreme weather events till date which are directly indicative of coastal hazards in addition to the parameters listed. These omissions are fairly significant in light of the objectives stated in the draft notification *"…ensuring protection of coastal population and structures from risk of inundation from extreme weather and geological events…"*

All of the above bring to question the so called " scientific basis" of the new draft and exposes the ambivalence of the MoEF, as details of the draft notification do not meet the very objectives that it sets out in the preamble.

Management by omission: ICZMPs

While the 'hands off' management strategy for CZM II and III areas is tantamount to turning a blind eye to all activities beyond setbacks and protection structures, the management strategy for CZM –I and IV areas is even more hazy. The activities here are to be decided by Integrated Coastal Zone Management Plans (ICZMPs) which are envisaged as land use plans for sensitive coastal areas. The method of formulating the ICZMPs on which the entire CZM I and IV are based is left completely open. There are no guidelines on how these should be formulated, leave alone the setting down of mandatory procedures for transparency and public participation in the planning process.

The definition and scope of ICZMPs are not elaborated in the notification and neither are there any rules or parameters for who should prepare ICZMPs. If these are envisaged to function as primary documents on the basis of which coastal areas are to be managed, a lot more serious thinking should have gone into various aspects of the planning process and its outputs.

CZM II and III areas do not even require any ICZM planning process. The inference from this is that CZM II and III areas can be managed without any specialised landuse plan whatsoever. As claimed in the draft CZM Notification, are existing landuse regulations and plans under 'other local

[7] Ibid 6
[8] Ibid 6
[9] See Annexure-I Swaminathan Committee Report

legislations' adequate to protect and manage these areas? If yes, what special purpose is met by bringing these areas under the proposed CZM Notification?

Sustainable development would imply some measure of regulation or restriction on the development activity itself. However, the CZM Notification not only allows activities that are proven to be far from environmentally sustainable, but also ensures that these remain unregulated through its 'hands off' management strategy.

C. Livelihoods and the CZM Notification

Whose livelihoods does the CZM Notification seeks to safeguard? The Swaminathan Committee Report was of the view that traditional rights were non-negotiable when recommending the methodology for conservation and protection.[10] Furthermore, the Swaminathan Committee Report also recommends the principle of social equity, intra-generational and inter-generational equity, as one of the twelve guiding principles that should govern future decisions on coastal zone management.[11] In the CZM Notification however, there is no concern or focus on the rights and access of coastal communities especially fishing communities. Given that the proposed legislation aims to govern and 'manage' development on the coast, this omission has significant implications for coastal communities. This is a big departure from the CRZ Notification which recognised fishing settlements and permitted certain rights and protection for the same. Till date it remains the only legislation to do so.

The regulations within the CRZ Notification for CRZ I, II and III areas protected the livelihoods and activities of fishing and other coastal communities. To quote from the Swaminathan Committee Report *'Most of the fishermen associations are satisfied with the present CRZ regime as it safeguards the coastal and marine ecosystems with the areas protected and no large developmental activities being permitted in the CRZ area. The No Development Zone of 200 mts in the rural areas, i.e., in the CRZ III areas have helped the fishermen to berth their boats, drying fish, mend nets, etc., thereby protecting their fishing rights'.* [12]

The CZM Notification states that coastal panchayats with more than 400 persons per sq km shall be declared as CZM II areas. This means that many of the earlier CRZ III categories would now become CZM II. The earlier notification had stringent regulations and an NDZ of 200 m for CRZ III areas that were characteristically coastal towns and villages with low levels of infrastructure development. This was to ensure that these landscapes are maintained at these levels and only forms of development appropriate to these spaces are taken up. But governments and vested interest lobbies have continually pushed for defining these areas as CRZ II so that these can be opened up for increased urbanisation. By putting these areas under CZM II, the precautionary principle and livelihood protection measures that were applicable to CRZ III areas (to restrict urbanisation pressures and ensure livelihood security, rights and access of coastal communities) have been done away with.

Livelihood activities such as fishing in CZM I waters and shores have not been mentioned thus compromising the livelihood security of traditional fishworkers. By not prioritising these activities in

[10] See Swaminathan Committee Report, page 97 point v.
[11] See Swaminathan Committee Report, page 91 point 8.
[12] See Swaminathan Committee Report Page 80, section 3.4.2

CZM I areas, the notification has equated all activities without recognising the differential impacts caused by various activities. This generalisation impacts the traditional rights of fishworkers who must be accorded first rights over coastal areas.

Appendix V of the draft CZM Notification is a list of activities that are to be allowed on the seaward side of the set back line. The list is titled as 'activities requiring access to the shoreline' and it includes undefined categories such as beach tourism and water sport facilities. Conspicuous by its absence are dwelling units of fisher communities and supportive minor infrastructure that they may need to carry on their livelihood such as fish drying areas and boat parking lots. By permitting the activities in the appendix on the seaward side of the setback line and at the same time pushing back all dwelling units of fisher communities behind the line, the government is proposing a dangerous situation of transferring the traditional ownership and access to beach-fronts from fisher communities to non-coastal agencies with commercial interests. There has already been much protest from fishing communities when the idea of moving them from the coast and freeing up the beach front land was mooted by the Government of Tamil Nadu, after the tsunami, (vide G.O 172). The government was forced to withhold the implementation of this order due to the vociferous resistance of the fisherfolk. None of the post-tsunami experience seems to have informed the MoEF in drafting this notification.

Appendix V (activities requiring shoreline facilities) read with Appendix III (areas of particular concern) allows most activities, including several which were prohibited in the primary CRZ notification, in CZM II and III areas, thereby making them vulnerable to even destructive activities. This is yet again demonstrative of the fact that the proposed notification only aims to give sanction t all the problematic amendments made of the CRZ Notification and lawfully allow even destructive activities on the coasts.

The management strategy of encouraging coastal protection measures such as sea walls will affect traditional fishing communities as the beach space and shore-front are essential for their livelihood activities such as landing the fishing crafts, fish drying, mending of nets and the storage of fishing gear. Fisher communities have generally opposed the building of sea walls in Tamil Nadu, as they consider it to be a hindrance to the landing and movement of their boats (Viswanathan, 2005). John Kurien states that sea walls in Tamil Nadu are likely to be the 'death knell' of the catamaran, as they need sandy beaches to land in and would otherwise be destroyed (Sridhar, 2005).

The lack of beach space forces fisherfolk to land, keep boats and store their gear fairly distant from their houses and sometimes even anchor their boats in open water (Bhalla, 2006). Agricultural communities are particularly apprehensive about sea walls as they believe it prevents rainwater run off into the sea leading to the flooding of agricultural land and degradation of the soil owing to stagnation of water (Viswanathan, 2005).

The end of the road for coastal protection

The main difference between the CRZ Notification and the draft CZM Notification is that the latter does away with the CRZ's perspective which held that the coastal space was meant only for activities that required the foreshore and waterfront. The main differences in the CZM Notification are:

- The CZM Notification uses the concepts of setbacks and coastal protection measures to redefine the limits of the coastal zone and to actually open spaces for non-coastal activities on the coast.

- It removes all the earlier regulations on activities on the coast that were under CRZ II and III categories. This includes most urban and rural areas on the coast.
- It even permits a number of activities within ecologically sensitive areas (earlier CRZ I areas).
- By completely omitting any monitoring or implementation mechanism, it implies that protection from the threats to the coast is not a priority.

Management sans monitoring or implementation structure

The proposed CZM Notification sets itself apart from the CRZ Notification in a striking manner in that it contains absolutely no monitoring mechanism. There are no deadlines indicated in the draft CZM Notification. There is no detail available about how the large and unwieldy 32 member National Board for Sustainable Coastal Zone Management will function. Operational details, powers and function of the implementation agencies are not specified. The Swaminathan Report did not recommend the implementation structure that this notification mentions. The present CZM Notification does away with the three-tier Coastal Zone Management Authorities at the national, state and district level (in some cases) and merges this agency instead with the State/UT Environmental Expert Committees (an agency already entrusted with the responsibility to implement the provisions of the EIA Notification 2006). Finally, there are absolutely no procedures laid out for the clearance of projects mentioned in the notification. The proposed notification is therefore by no means an improvement over the CRZ Notification in terms of ensuring sustainable development or livelihoods or conservation. Its actual objectives are evidently not these. It is not possible to implement any of the clauses of the CZM Notification in actuality.

The MoEF does not demonstrate a convincing interest in a scientific approach to coastal management but finds clear value in employing scientific terminology in its legal text. This however, is too obvious a masquerade. The picture that emerges from the above analysis that the proposed CZM Notification is being used to deflect attention from the larger process of dismantling environmental regulations for industrial promotion. The CZM Notification, if brought into force will spell the death knell for several efforts towards coastal and marine conservation. In different parts of the country, fisherfolk unions, coastal communities, local governments and NGOs have used a combination of experience, research and legal spaces to prevent the exploitation of coasts by non-coastal commercial interests. Their actions range from fighting sand mining mafias, preventing sea wall construction, proactive measures like protection and restoration of sand dunes, turtle-nesting beaches mangroves and encouraging traditional forms of fishing.

The analysis above shows that the proposed CZM Notification does not deliver on its own objectives of sustainable development, sustainable livelihoods and conservation. Furthermore it shows that crucial scientific parameters have been ignored exposing gaps in its 'sound' and 'established' scientific principles. The content and process of any coastal management scheme needs to involve those who are primary users of the coast and those who have been involved actively in promoting coastal and marine conservation initiatives. The CZM Notification in its present form exemplifies the recent negative trend of 'regulatory capture' – a conscious process where environmental governance is influenced by commercial lobbies and environmental laws are dictated by investment priorities. While the concerned citizenry busies itself demystifying this implausible law, the MoEF needs only to acclimatise to another era of non-implementation under the CZM Notification.

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Annexure 1

Comparison of the CRZ and draft CZM Notification categories

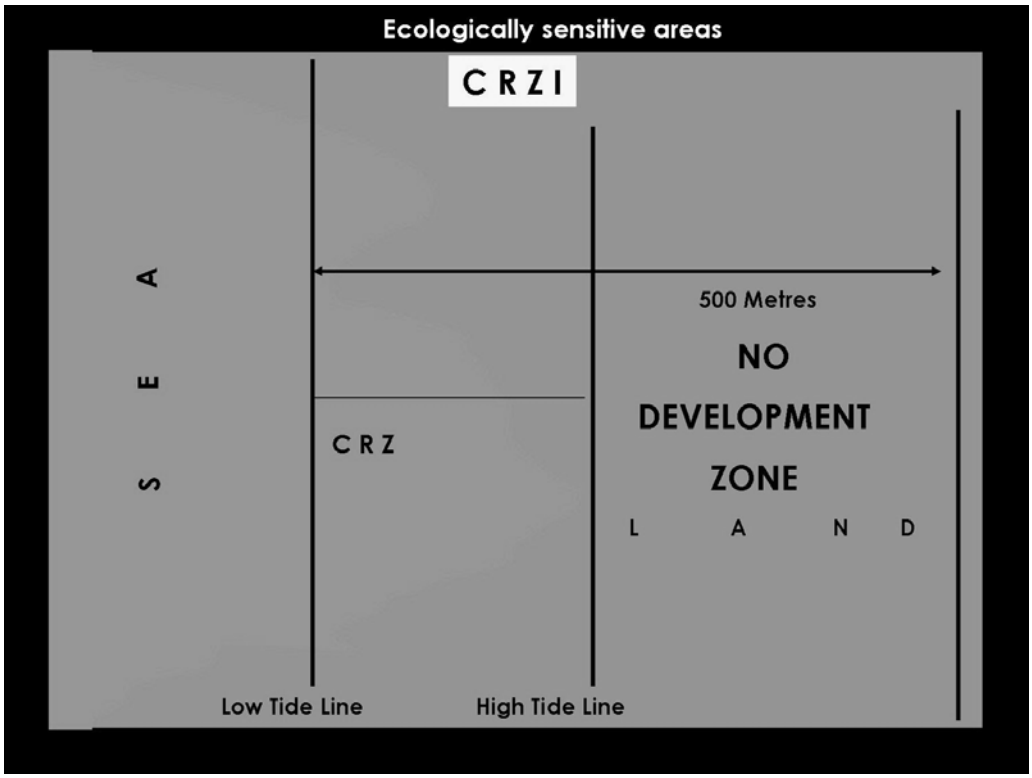
CRZ Notification, 1991	Draft CZM Notification
CRZ I Ecologically Sensitive Areas • By and large a "No development Zone" (NDZ) (certain amendments allowed activities later on)	**CZM I** Ecologically Sensitive Areas • **NOT** an NDZ • Land use determined by ICZMP • ICZMP - definition, criteria, guidelines and scope not elaborated (currently seems arbitrary) • Subsumed by other development and economic considerations-Protection mechanisms governed by "technical feasibility and costs" and the provisions of the NEP. •
CRZ II Areas that are substantially built up (greater than 50 % as of 1991) or that have Municipalities/Corporations	**CZM II** No clear distinction- depends on economic consideration of the area. Includes, • Coastal Municipalities/Corporations • Coastal Panchayats with population density > 400 persons/sq km. • Ports and Harbours • Notified Tourism Areas • Mining sites • Notified Industrial Estates • Special Economic Zones • Heritage areas • Notified Archaeological sites under the Protected Monuments Act • Defence areas/installations • Power Plants CZM II Option A Setback Line - certain permissible development activities still allowed (those in annexure V) in front of setback line. Other activities only behind setback line.

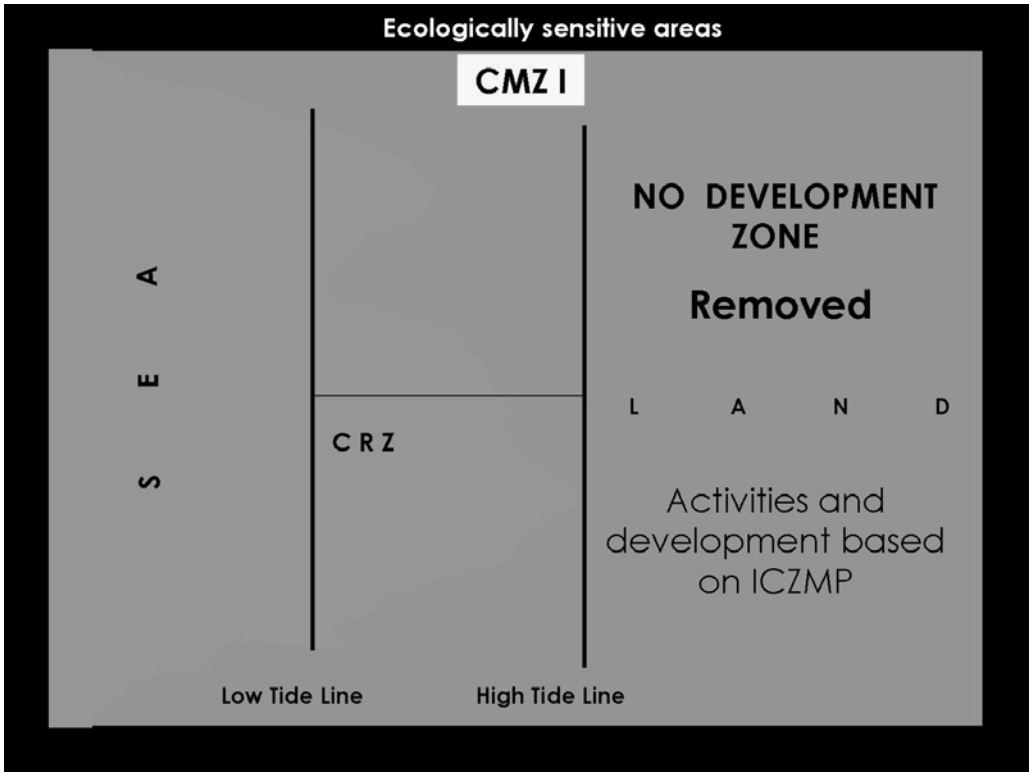
CRZ Notification, 1991	Draft CZM Notification
Development only on the landward side of the road. Seaward side of the road is by and large an NDZ (amendments allowed activities later on).	CZM II Option B Coastal Protection structures are allowed and become the setback line. No clear guideline on use of option B thus encouraging sea walls. By definition **most current CRZ III areas will become CZM II** and hence will no be longer protected by the 200 m NDZ of the CRZ III.
CRZ III • Areas other than CRZ I and II • No Development Zones (NDZ) of 200 m (certain amendments allowed activities later on) • Tourism infrastructure only beyond 200 m.	**CZM III** • Areas other than CZM I and II • NDZ provision removed • Allows new tourism infrastructure everywhere Setback Line - certain permissible development activities still allowed (those in annexure V) in front of the setback line. Other activities relegated behind the setback line

Annexure 2

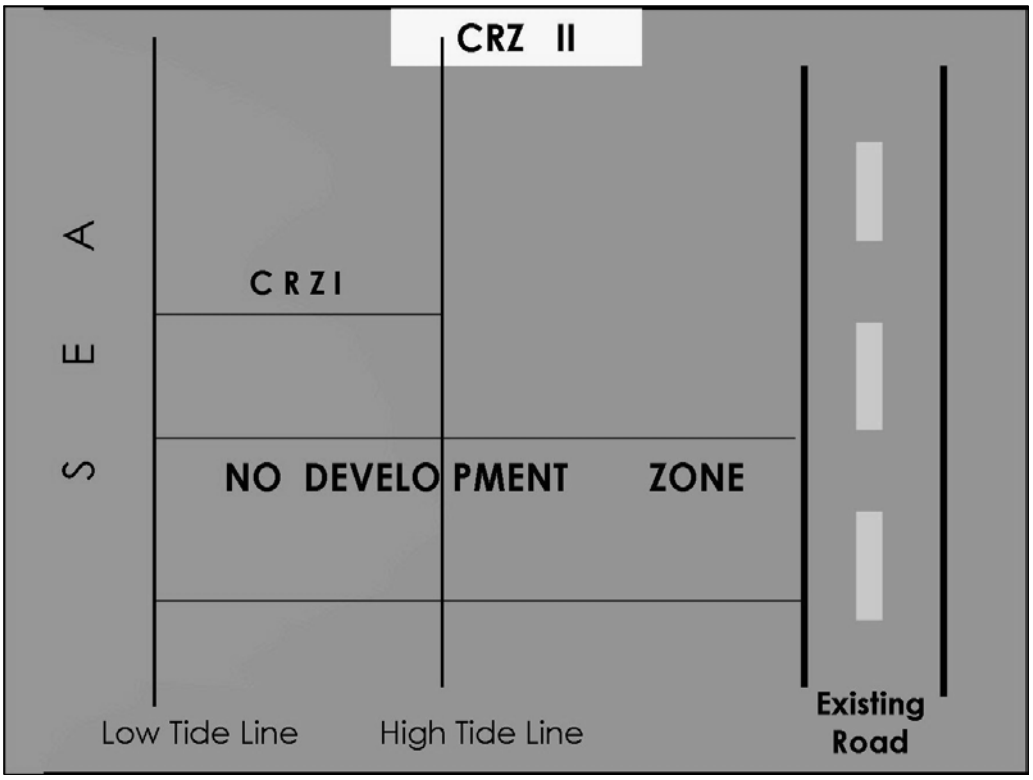
Pictorial comparison of the provisions of the CRZ and proposed CZM Notifications

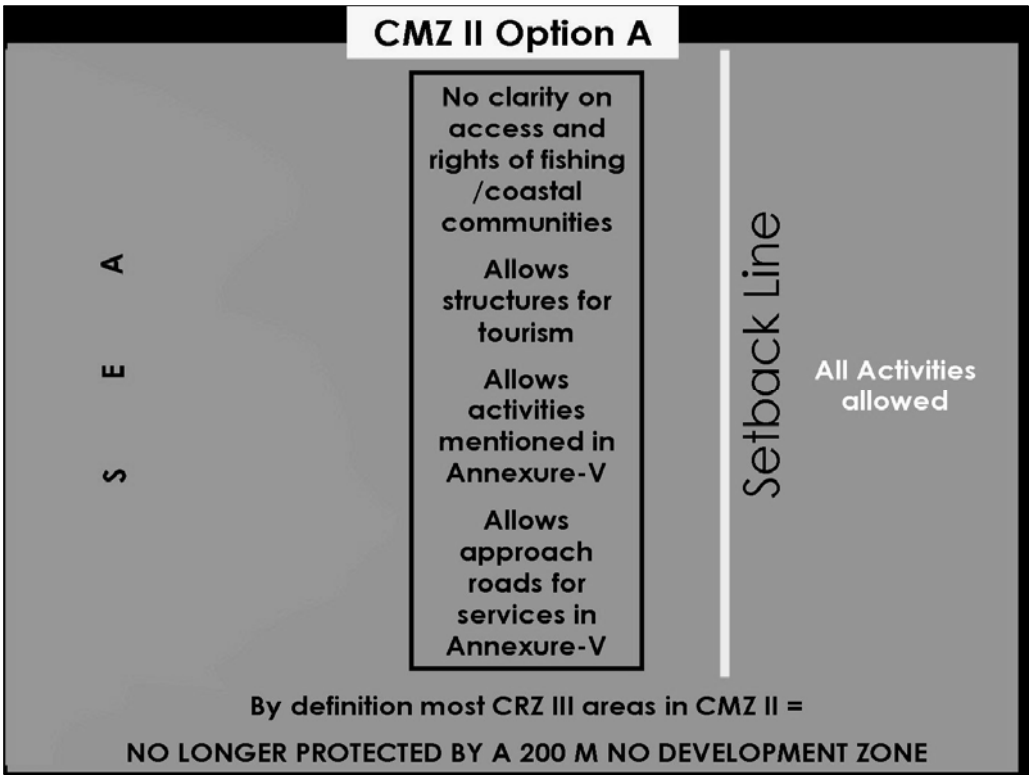
1. Ecologically sensitive areas under CRZ I and CZM I



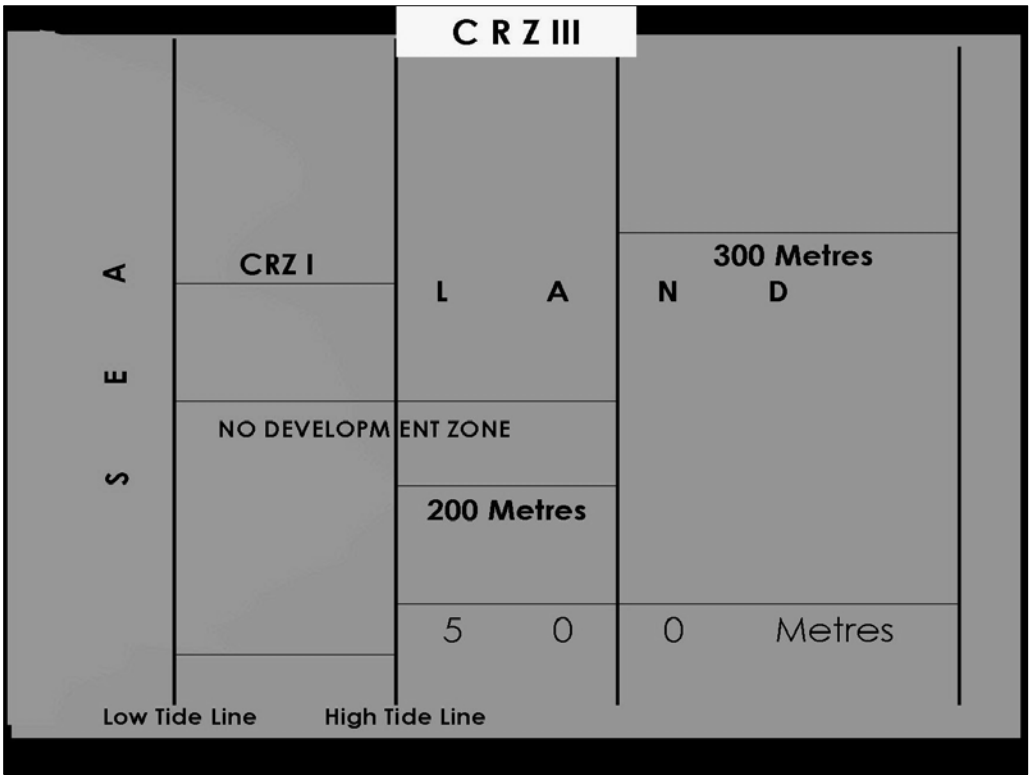


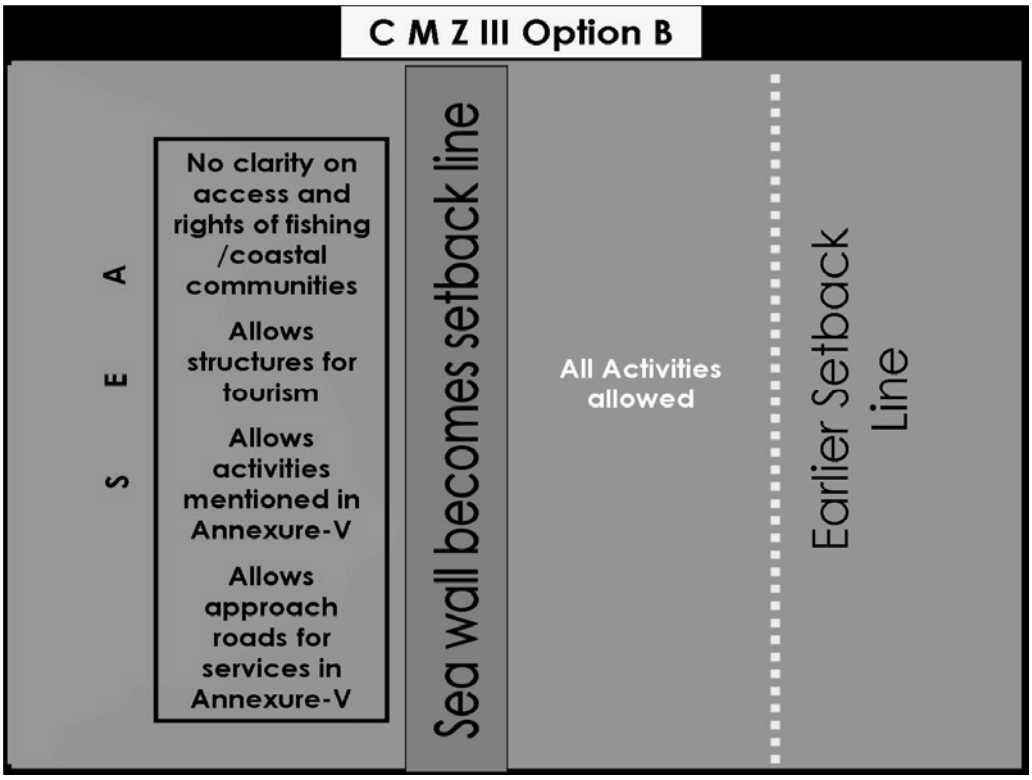
2. Restrictions for CRZ II and CZM II areas

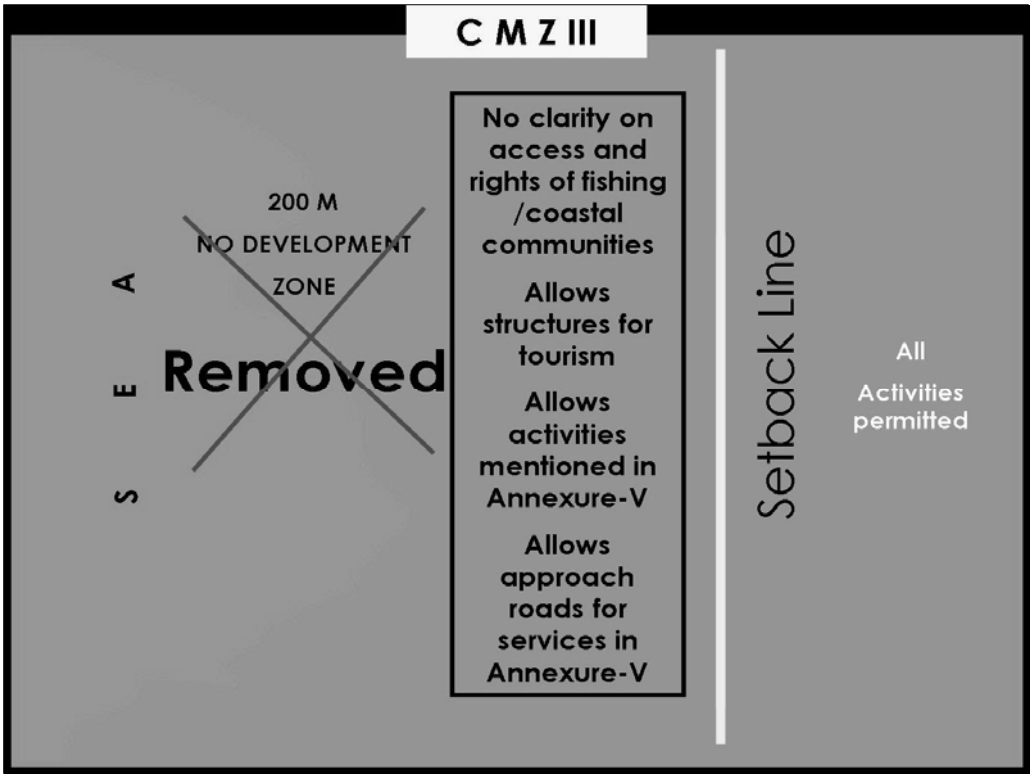




3. Provisions of the CRZ III and CZM III






C M Z III
S E A
200 M
NO DEVELOPMENT
ZONE
Removed
No clarity on access and rights of fishing /coastal communities
Allows structures for tourism
Allows activities mentioned in Annexure-V
Allows approach roads for services in Annexure-V
Setback Line
All
Activities
permitted

Annexure 3
Draft Coastal Zone Management Notification, 2007

MINISTRY OF ENVIRONMENT AND FOREST
DRAFT NOTIFICATION

COASTAL ZONE MANAGEMENT (CZM) NOTIFICATION 2007

S.O. No…(E) Whereas the Central Government in the Ministry of Environment and Forests issued the Coastal Regulation Zone Notification vide No. S.O. 114(E) dated the 19th February 1991, under which the coastal stretches were declared Coastal Regulation Zone (CRZ) and restriction were imposed on the setting up and expansion of industries, operations and processes in the said zone for its protection;

And whereas the said notification has been amended from time to time based on recommendations of various committees, judicial pronouncements, representations from State Governments, Central Ministries, and the general public, etc., consistent with the basic objective of the said notification;

And whereas perceiving the continuing difficulties posed by the Notification in the effective implementation for the sustainable development of coastal regions as well as conservation of coastal resources, the Ministry of Environment and Forests constituted an expert committee vide an Order No.15 (8)/2004-IA-III, dated 19th July 2004 under the Chairmanship of Prof. M.S.Swaminathan, with experts in the areas of environmental law, marine bio-diversity, marine geology, environmental economics, socio-economics, remote sensing, coastal engineering, urban planning, and marine fisheries to carry out a comprehensive review of the said Notification including all its amendments in the light of findings and recommendations of previous committees, judicial pronouncements, representations of various stakeholders, and suggest suitable amendments, if necessary, to make the coastal regulatory framework consistent with well established scientific principles of Coastal Zone Management;

And whereas the above Expert Committee had submitted its report to the Ministry of Environment and Forests in February, 2005 containing specific recommendations to build on the strengths of existing regulations and institutional structures and fill gaps for conservation and improving the management of the coastal resources by enhancing the living and non-living resources of the coastal zone; by ensuring protection to coastal populations and structures from risk of inundation from extreme weather and geological events; and by ensuring that the livelihoods of coastal populations are not unduly hampered;

And whereas the Central Government in the Ministry of Environment and Forests after carefully considering the above report and all the recommendations made therein have decided to accept them in principle for implementation;

And whereas in accordance with the above decision, the Central Government proposes to bring into fore a new framework for managing and regulating activities in the coastal and marine areas for conserving and protecting the coastal resources and coastal environment and by ensuring protection of coastal population and structures from risk of inundation from extreme weather and geological

events; and by ensuring that the livelihoods of coastal populations are not unduly hampered; by replacing the Coastal Regulation Zone Notification, 1991 as amended from time to time;

And now, therefore, the Central Government in the Ministry of Environment and Forests in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section 2 of Section 3 of the Environment (Protection) Act, 1986 (29 of 1986) and as required under sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 proposes to issue a notification to be known as the Coastal Zone Management Notification, 2007, for the information of the public likely to be affected thereby and notice is hereby given that the said draft notification will be taken into consideration by the Central Government on and after the expiry of sixty days from the date of publication of said notification in the Official Gazette.

Any person interested in making any objections or suggestions on the proposals contained in the draft notification may do so in writing within the period so specified through post to the Secretary, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi – 110003, or electronically at e-mail address: secy@menf.nic.in

1. (1) This notification shall be called the Coastal Zone Management Notification, 2007.

(2) This notification shall come into force from the date of its final publication in the Official Gazette.

2. Objective:

The objective of this notification is protection and sustainable development of the coastal stretches and marine environment through sustainable costal zone management practices based on sound, scientific principles taking into account the vulnerability of the coast to natural hazards, sustainable livelihood for local communities, and conservation of ecologically and culturally significant coastal resources.

3. **Definitions :** In this notification the terms, unless the context otherwise requires, shall have the following meaning in each case:

a) **'Coastal Zone'** shall mean the area from the territorial waters limit (12 nautical miles measured from the appropriate baseline) including its sea bed, the adjacent land area along the coast and inland water bodies influenced by tidal action including its bed, upto the landward boundary of the local self government/local authority abutting the sea coast, provided in case of ecologically and culturally sensitive areas, the entire biological/physical boundary of the area may be included, if necessary, for which specific notification would need to be made.

b) '**Integrated Coastal Zone Management**-(**ICZM**)' shall mean a process by which decisions are made for sustainable use, development and protection of coastal and marine areas and resources.

c) **'Integrated Coastal Zone Management Plan(ICZMP)'** is the land use plan prepared for implementation of the Integrated Coastal Zone Management.

d) **'Local Self Government/Local Authority'** shall mean a village, panchayat, or a urban local body, or any other body or authority, by what ever name called, for the time being invested by law,

for rendering essential services or, with control and management of civic services, within a specified local area abutting the sea coast.

e) **'Setback Line'** shall mean a line demarcated along the coast, based on its vulnerability to natural hazards as per Guidelines given in this notification in Appendix-I.

f) **'Ecologically Sensitive Areas'** are those areas of the coastal zone that plan an important role in maintaining the functional integrity of the coast, including acting as natural barriers to coastal hazards and/or harbouring a diverse biodiversity that provide valuable resources to local communities.

g) **'Expert'** is a person with specialized knowledge in a specified field, with at lease a Master's degree from a recognized university in case of science (including social sciences, economics and management) disciplines; or a professional Bachelor's degree from a recognized university in case of engineering, technology, medicine, or legal disciplines; or a Post-Graduate Diploma in Forestry from the Indira Gandhi National Forest Academy in case of Forestry; with at lease fifteen (15) years of full-time professional experience in the specified field after award of the qualifying degree, in the event of the person concerned possessing, in addition, a higher degree from a recognized university, i.e. Ph.D or D.Sc. in case of science (including social sciences, economics, and management) disciplines; or a M.Tech/MD/LLM degree in case of engineering, technology, medicine, or legal disciplines; the period of full-time professional experience after gaining the higher degree may be ten(10) years.

h) **'Professional'** is a person who possesses the academic qualifications as specified for experts, but does not yet possess the requisite experience.

4. Categorization of the Coastal Zone: For the purpose of management and regulation, the coastal zone shall be divided into four categories;

i) Coastal Management Zone – I (CMZ – I) shall consist of areas designated as Ecologically Sensitive Areas (ESA), which are listed generically in Appendix – II.

ii) Coastal Management Zone- II (CMZ – II) shall consist of areas, other than CMZ – I and coastal waters, identified as "Areas of Particular Concern (APC)" such as economically important areas, high population density areas, and culturally/strategically important areas. The administrative boundaries of these "Areas of Particular Concern" would be boundaries of CMZ – II. The generic list of such areas is given in Appendix – III.

iii) Coastal Management Zone – III (CMZ – III) shall consist of all other open areas including coastal waters, that is all areas excluding those classified as CMZ – I, II and IV.

iv) Coastal Management Zone – IV (CMZ – IV) shall consist of inlands territories of Andaman and Nicobar, Lakshadweep, and other offshore islands.

v) In respect of the islands in coastal backwaters areas which are not included in CMZ – I or CMZ – II, such areas may be included in CMA – IV at the option of the Local Authority; otherwise they would be included in CMA – III. Once exercised, the option of the Local Authority would not be subject to change.

(i) National Board for Sustainable Coastal Zone Management

This Board consisting of not more than 31 Members shall have the mandate to provide policy advice to the Central Government on matters relating to coastal zone management. The composition of the Board shall be as given in Appendix – IV. The term of the non-official members of the Board shall be three (3) years, and may not be renewed.

(ii) State/UT Coastal Zone Management Authorities

The State/UT Environmental Appraisal Authorities set up under the provisions of the EIA Notification dated 14.09.2006, under the Environment (Protection) Act, 1986 shall also be the State/UT Coastal Zone Management Authorities. They shall have the mandate to undertake all regulatory functions at the State/UT level under this notification. These Authorities will, in respect of matters to be considered by the Authority, invariably obtain the scientific advice of the State/UT Environmental Expert Committees, also set up under the provisions of the EIA Notification dated 14.09.2006, referred to above. The Chairpersons of the State/UT Environmental Expert Committees may co-opt experts from other relevant disciplines, as necessary in particular cases.

5. Management Methodology: The management methodology and approach for the Coastal Management Zone shall be as follows:

(I) Notification of the Setback Line: The Setback Line, for the entire coast, excluding CMZ – IV areas, will be notified in one or more stretches at a time in a map on cadastral scale by the Central Government in the Ministry of Environment and Forests. For this purpose, the Central Government may issue detailed technical Guidelines, based on the approach set forth in Appendix – I. The notification shall be based on the delineation to be carried out by a competent and established scientific institution specializing in earth surveys and mapping, among a set of such institutions to be notified by the Central Government in the Ministry of Environment and Forests.

(II) Coastal Management Zone - I

The ecologically sensitive areas as per generic list given in Appendix – II shall be identified within the coastal zone by the Central Government in the Ministry of Environment and Forests jointly with the concerned State Government/Union Territory Administration, with the technical assistance provided by one or more competent and established scientific research institutions specializing in coastal resources management, and notified by the Central Government. All activities in CMZ – I areas shall be regulated by the State/UT Coastal Zone Management Authority concerned on the basis of an Integrated Coastal Zone Management Plan (ICZMP) to be prepared by the State/UT Administration with the help of one or more competent and established scientific research institutions specializing in coastal resources management, and notified by the Central Government. The ICZMPs would be endorsed by the State/UT Environmental Appraisal Authority concerned. The ICZMPs would thereafter be forwarded for review by the Central Government in the Ministry of Environment and Forests and given approval (or rejected) within 60 days of receipt. It would thereafter be notified by the State/UT Administration in terms of the approval given by the Central Government. In the event of the 60 days time limit expiring without decision by Central Government, the State/UT Administration may notify the ICZMP as submitted to the Central Government after endorsement by the State/UT Environmental Appraisal Authority concerned. The ICZMPs prepared shall ensure proper protection and conservation of all ecological entities

within the notified ecologically sensitive areas keeping in mind technical feasibility and costs, and otherwise consistent with the provision of the National Environment Policy, 2006. The implementation of the ICZMP by the State Government/UT Administration shall be monitored by the concerned District Magistrates.

(III) Coastal Management Zone – II

The Local Authority concerned, may, at its option, adhere to one or the other of the following approaches to coastal protection. Once such option is exercised, it would not be subject to change:

Option A : **Areas not covered by Coastal Protection Structures** : Except for activities which require shoreline access, listed in Appendix – V, all new physical and social infrastructure, and habitations, are to be located beyond the Setback Line on the landward side. In case of expansion of existing physical and social infrastructure located on the seaward side of the Setback Line, the entire infrastructure would be relocated to beyond the Setback Line on the landward side. In the case of habitations located on the seaward side of the Setback Line, no increase in covered area would be permissible. However, modernization, repairs, and reconstruction of existing habitations on the seaward side of the Setback Line, without increase in covered area may be undertaken with prior approval as necessary under the Local Authority Laws and Regulations. On the landward side of the Setback Line, in respect of new and existing physical and social infrastructure, and habitations, there would be no additional restrictions under this notification, on construction, modernization, or expansion, beyond those under the Laws and Regulations of the Local Authority.

Option B: Areas covered by Coastal Protection Structures: One or more coastal protection structures which provide at least the same measure of protection from coastal hazards as the Setback Line may be constructed by the Local Authority. The detailed engineering design of these structures, together with the delineation of the areas to be provided protection thereby, would be reviewed and endorsed by the State/UT Coastal Management Authority, and submitted thereafter through the State/UT Administration to the Central Government in the Ministry of Environment and Forests for approval. Such approval or rejection is to be conveyed by the Central Government within sixty (60) days of receipt form the State/UT Administration, failing which the State/UT Administration may convey approval of the detailed engineering design to the Local Authority concerned. Upon completion of construction the State/UT Administration would cause the structures to be inspected by a competent technical authority, and submit the same to the Central Government in the Ministry of Environment and Forests for confirmation that the work has been satisfactorily completed as per approved detailed engineering design. The Central Government, within sixty(60) days of receipt of the technical inspection report from the State/UT Administration, after conducting any further technical inspections as in its opinion may be necessary, confirm or reject the same; if the latter, with detailed technical reasons, to the concerned State/ UT Administration. In the event that the Central Government does not confirm or reject the technical inspection report of the State/ UT Administration within the specified period of sixty (60) days, the State/ UT Administration would confirm satisfactory completion of the structures to the Local Authority concerned.

Upon confirmation as above that the coastal protection structures have been satisfactorily completed, all physical and social infrastructures, and habitations, in the areas afforded protection by these structures, be subject to the normal Local Authority Laws and Regulations, and all other Laws

and Regulations in force. There are no new restrictions under this notification with respect to such areas as are provided protection by the coastal structures.

(IV) Coastal Management Zone - III

Except for activities which require shoreline access, listed in Appendix V, all new physical and social infrastructure, and habitations are to be located beyond the Setback Line on the landward side. In case of expansion (but not maintenance or repairs) of existing physical and social infrastructure located on the seaward side of the Setback Line, the entire infrastructure would be relocated to beyond the Setback Line on the landward side. In the case of habitations located on the seaward side of the Setback Line, no increase in covered area would be permissible. However, modernization, repairs, and reconstruction of existing habitations on the seaward side of the Setback Line, without increase in covered area may be undertaken with prior approval as necessary under the Local Authority Laws and Regulations. On the landward side of the Setback Line, in respect of new and existing physical and social infrastructure, and habitations, there would be no additional restrictions on construction, modernization, or expansion, beyond those under the Laws and Regulations of the Local Authority and other Laws and Regulations in force.

(V) Coastal Management Zone – IV

All activities will conform to the approved ICZMPs, which fact will be determined in each case by the concerned State/ UT Coastal Zone Management Authority.

6. Operation of the CRZ Notification 1991

The Coastal Regulation Zone Notification, 1991 shall cease to operate within:

(a) A CMZ – I area, from the date of notification of the concerned ICZMP.
(b) A CMZ – II area, from the date of notification of the Setback Line, or satisfactory completion of coastal protection structures, the latter in respect of areas provided protection by such structures.
(c) A CMZ – III area, from the date of notification of the Setback Line.
(d) A CMZ – IV area, from the date of notification of the concerned ICZMP.
(e) The approved Integrated Coastal Zone Management Plan shall be reviewed by Ministry of Environment and Forests, based on the request made by the concerned Union Territor/State Government.

(F.No.11-83/2005-IA.III)

(J. M. Mauskar)

Joint Secretary.

Appendix -I

SETBACK LINE

The Setback Lines in the coastal management zones categorized as CMZ – I, II and III will be based on vulnerability of the coast to natural and manmade hazards. This procedure is followed in many countries where the coast has been mapped for vulnerability to coastal hazards.

For the purpose of mapping the vulnerability of the coast, six parameters are taken into account: elevation, geomorphology, sea level trends, horizontal shoreline displacement (erosion/accretion), tidal ranges, and wave heights. A brief on each of the parameters which are to be considered for drawing up the Setback Line are given below:

(i) **Elevation**: The elevation data shall be obtained from the available coastal toposheets and satellite data surveys.

(ii) **Geomorphology**: The land forms will be identified on the maps based on the available toposheet and remote sensing data. Bathymetry to be derived from Naval Hydrographic Charts on location specific surveys.

(iii) **Sea Level trends**: The sea level trend data shall be based on primary data published by Survey of India. The median estimate of mean sea level rise in the next one hundred (100) years in terms of the Fourth Assessment Report of the Inter-Governmental Panel on Climate Change (IPCC) shall be taken into account.

(iv) **Horizontal Shoreline displacement**: The erosion/accretion data of horizontal shoreline displacement shall be obtained from long term information derived from Survey of India Topographic maps (1967) and the latest satellite data. Horizontal shoreline displacement will be estimated (median estimate) over the next 100 years.

(v) **Tidal Ranges** : Tide tables published by the Survey of India.

(vi) **Wave heights**: Wave heights obtained from ship observations published by National Institute of Oceanography or other locally available measured data.

The level of protection to be provided by the Setback Line will correspond to protection from coastal hazards with a one percent (1 %) probability of occurrence in any given year, after accounting for the median estimates of mean sea level rise and horizontal shoreline displacement in the next one hundred (100) years.

Further detailed Technical Guidelines for delineation of the Setback Line may be provided by the Central Government in the Ministry of Environment & Forests.

Appendix – II

CMZ – I : GENERIC LIST OF ECOLOGICALLY SENSITIVE AREAS (ESA)

(i) Mangroves

(ii) Coral reefs

(iii) Sand Beaches and Sand Dunes

(iv) Inland tidal water bodies, i.e. estuaries, lakes, lagoons, creeks.

(v) Mudflats

(vi) Marine Wildlife protected areas under the Wild Life (Protection) Act.

(vii) Coastal fresh water lakes

(viii) Salt Marshes

(ix) Turtle nesting grounds

(x) Horseshoe crabs habitats

(xi) Seagrass beds

(xii) Sea weed beds

(xiii) Nesting grounds of migratory birds.

Appendix – III

CMZ – II : LIST OF AREAS OF PARTICULAR CONCERN

a) Coastal Municipalities/Corporations (the entire notified area)

b) Coastal Panchayats with population density more than 400 persons per sq km. (the entire notified area) as per the latest Census of India.

c) Ports and Harbours.

d) Notified Tourism Areas

e) Mining sites

f) Notified Industrial Estates

g) Special Economic Zones

h) Heritage areas

i) Notified Archaeological sites under the Protected Monuments Act.

j) Defence areas/installations

k) Power Plants

Appendix – IV

COMPOSITION OF NATIONAL BOARD FOR SUSTAINABLE COASTAL ZONE MANAGEMENT

1.	Union Minister for Environment and Forests	-	Chair
2.	Union Minister-in-charge of Ministry of Earth Sciences	-	Co-Chair
3.	Secretary, Ministry of Environment & Forests	-	Member Secretary.
4.	Experts (by name) in:		
	Coastal Ecosystems	-	1
	Marine biology	-	1
	Maritime law	-	1
	Meteorology	-	1
	Disaster Management	-	1
	Environmental Economics	-	1
4.	Representative of the National Commission for Women	-	1
5.	Representative of the Ministry of Defence	-	1
6.	Representative of the Ministry of Urban Development	-	1
7.	Representative of the Ministry of Panchayati Raj	-	1
8.	Representatives of community based organizations of the mainland coastal population	-	3
9.	Representatives from fisheries, aquaculture, tourism, industries, mining, ports, sectors	-	6
10.	Representatives of coastal Rural District Panchayats	-	3
11.	Representatives of coastal Urban Local Authorities	-	3
12.	Representatives of Andaman & Nicobar and Lakshadweep Islands	-	3

Appendix – V

ACTIVITIES REQUIRING ACCESS TO THE SHORELINES

1. Port and Harbours, including refuelling facilities, and dredging and reclamation
2. Fish Landing Sides
3. Public Toilets
4. Lighthouses and Light-towers
5. Beach tourism and water sports facilities
6. Salt Pans
7. Mining of minerals other than beach sand, rocks, gravel, and sea-shells
8. Ship building and repair facilities
9. Coastal protection structures
10. Hydrocarbon exploration and production
11. Defence installations
12. Discharge pipelines for treated effluent and sewage
13. Approach roads, railways, pipelines, power transmission and distribution lines to service the above.

The Indian Ministry of Environment and Forests is promulgating a new law titled the Coastal Zone Management Notification, 2007. Is the proposed CZM Notification designed for better coastal management? What evidence exists to show that conservation and sustainable livelihoods are the objectives of this law? This report examines the content and process behind this new law to reveal concerns with its real intent. The report also contains a copy of the proposed law and annexes comparing it with the original CRZ Notification, 1991.

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