DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE ON SCIENCE & TECHNOLOGY, ENVIRONMENT & FORESTS
TWO HUNDRED AND SECOND REPORT ON COASTAL MANAGEMENT PROGRAMMES

(PRESENTED TO HON'BLE CHAIRMAN, RAJYA SABHA ON THE 20TH MARCH, 2009)
(FORWARDED TO HON'BLE SPEAKER, LOK SABHA ON THE 20TH MARCH, 2009)

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RAJYA SABHA SECRETARIAT
NEW DELHI
___________, 2009/___________, 1930 (SAKA)

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**Nominated w.e.f. 24th October, 2008
* Shri Babubhai K. Katara ceased to be a member of the Committee consequent upon his expulsion from the membership of the Lok Sabha w.e.f. 21st October, 2008.
# Smt. Neeta Pateriya ceased to be a member of the Committee consequent upon her resignation from the Lok Sabha w.e.f. 19th December, 2008.

SECRETARIAT
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Shri A. K. Gandhi, Joint Director
Shri V. S. P. Singh, Deputy Director
Shri S. Rangarajan, Assistant Director
I, the Chairman of the Department-related Parliamentary Standing Committee on Science & Technology, Environment & Forests, having been authorised by the Committee to present the Report on its behalf, present this Two Hundred and Second Report on the Coastal Management Programmes.

2. Coastal environment plays a vital role in nation’s economy by virtue of the resources, productive habitats and rich biodiversity. Nearly twenty five percent of the total population of the country live within a distance of 50 Kms from sea. The fishermen communities in these areas mainly depend on the coastal resources and the sea for their survival. Several activities such as unregulated tourism, polluting industries, aquaculture, rapid urbanization, etc. pose threat to the ecosystem and to lives and livelihoods of the coastal communities. In the past, to protect and regulate the coastal environment the Government has implemented several legislations including Coastal Regulation Zone Notification, 1991. The CRZ Notification has been amended from time to time based on the recommendations of various committees, judicial pronouncements, representatives from State Governments, general public etc. On 22nd July, 2008, the Government decided to bring into force a new framework, for managing and regulating activities connected to coastal resources and coastal environment, based on the recommendations of the Expert Committee headed by Prof. M.S. Swaminathan. Accordingly, it issued a draft Coastal Management Notification, 2008 (Annexure-I) inviting objections or suggestions on the proposals contained in the said Notification. The CMZ Notification has created unrest among the people living in the coastal areas.

3. Considering the importance of the subject, the Department-related Parliamentary Standing Committee on Science & Technology, Environment & Forests in its meeting held on 12th September, 2008, decided to take up for examination the aspects relating to Coastal Management Programmes and report thereon. In order to have wider consultations on the subject the Committee invited suggestions/views/comments of individuals/institutions/organizations interested in the subject matter by issuing a Press release in various leading newspapers in the country. The Committee received 69 memoranda in this regard. A list containing names of individuals/experts/NGOs/Organisations, etc. who submitted return memoranda, is given in Annexure - II. The Committee also invited suggestions/views of coastal State Govts. and Union Territories. The Committee heard the views of the Secretaries of Ministries of Environment and Forest and Earth Sciences, Prof. M.S. Swaminathan, the Chairman of the Expert Committee constituted to Review the Coastal Regulation Zone Notification, 1991 and Regional Director, Centre for Environment Education, Ahmedabad. In addition, the Committee also heard the views of Additional Surveyor-General of Survey of India, Dehradun and Group Director, Space Applications Centre, Ahmedabad. A list showing the details of the representatives of various Ministries/Departments, experts who appeared before the Committee for oral evidence is given in Annexure-III and a list of the State/UT Governments who have sent their comments on the subject matter is given in Annexure-IV. In addition, the Committee undertook a study visit to Thiruvananthapuram, Kanyakumari, Chennai, Port Blair and Hyderabad to have in-depth knowledge and to interact with the people affected in the Coastal States and UTs in connection with the Coastal Management Programmes.

4. The Committee expresses its thanks to the Officers of the Ministries, experts, NGOs and the representatives of various organisations of fishermen, who appeared before the Committee, to present their valuable suggestions.
INTRODUCTORY

Ocean and its coast is one among a number of unique aesthetic and majestic gifts ordained by nature to mankind. Through its sheer charming, soothing, cool and serene ambience that it creates all around, it has aroused and invoked piety, reverence, awe and admiration in the hearts of human beings. Spiritual and religious significance apart, ocean has also been considered as the repository and treasure trove of precious wealth. As the legend goes fourteen gems emerged out of the churning of the ocean – *Samudra Manthan*. The coastal region thus provides a peculiar blend of precious natural resources and unique panoramic landscape and that’s why living on the coast dates as back as the origin of civilizations. It is also accepted that life began in the ocean.

2. But as society and civilization took the leap to the path of development – predominantly economic, the devotional aura and spiritual essence gradually started losing its sheen and gave way to the greed for natural resources. The finer balance between conservation and coastal resource utilization got disturbed with the coastal areas becoming the focal point of development. But this development went by and large unplanned and unregulated. This has put the natural ecosystem, fragile coastal environment and the coastal zone under tremendous stress. Coastal zone is the transitional area falling between land and sea which is influenced by both terrestrial and marine environments.

3. Our country is endowed with a long coastline stretching up to 7500 kms. – covering the mainland which accounts for 5,400 kms. and Andaman, Nicobar and Lakshadwee Islands which together account for 2,032 kms. It varies from open sea to semi-closed (creek, lagoons) coastal waters and shows significant diversity in environmental and demographic feathers.

4. Uses of the coastline can broadly be classified under the following four categories:

   (i) **Natural Resource Utilization** – This includes fisheries, forests, oil and natural gas, mining, etc.;
   (ii) **Infrastructure** – It involves transportation, ports, harbours, shoreline protection works and defence;
   (iii) **Tourism and recreation**; and
   (iv) **Conservation and protection of biodiversity**.

REPORT

Although there have been a number of Legislations/Acts/Rules governing coastal activities viz. Indian Fisheries Act 1897; Indian Ports Act, 1902, Merchant Shipping Act, 1974; Water (Prevention and Control of Pollution) Act, 1974; Indian
Coast Guard Act, 1974; Environment (Protection) Act, 1986, etc., a tentative non-statutory step arising out of concern over unplanned development in coastal areas was taken in 1981 when coastal States, UTs were asked by the Central Government to take adequate measures to protect their coastline. Guidelines were also sent to them but all these efforts failed to make desired impact in the absence of legislative support behind them. To deal with coastal activities; protect and preserve coastal environment and to conserve coastal resources in a decisive and holistic manner, the first major legislative action was taken in 1991 in the form of Coastal Regulation Zone Notification under the Environment (Protection) Act, 1986. Regulating all developmental activities in the CRZ area and according due recognition to the basic rights and livelihood of the local communities constituted the leitmotif of the notification. The salient features of the CRZ, Notification are enumerated below:-

(i) Preservation of coastal ecology; conservation of coastal environment; regulated development of the coast; control of pollution along the coast; and recognition and protection of the traditional rights of the coastal communities on the sea and the coast are some of the prominent principles and tenets on which the edifice of CRZ notification has been erected as it had been conceived in the backdrop of the fact that unregulated and reckless construction and other activities along the coasts has resulted in over exploitation of marine and coastal resources and discernible degradation of coastal habitats and environments. CRZ Notification proved to be a beacon light which created awareness towards the significance of coastal environment and ecology not only among the people but also among the policy and decision makers. This Notification has been instrumental in prohibiting polluting and hazardous industries coming up along the coast; containing disposal of sewage/effluent into the sea and protection of life and property to a considerable extent despite numerous cases of its violations.

(ii) It is for the first time through this Notification that an attempt was made to define the sensitive coastal zone area which required to be protected. Coastal stretches of seas, bays, estuaries, creeks, rivers and backwaters influenced by tidal action towards landward side upto 500 metre from the High Tide Line (HTL) constitute the Coastal Regulation Zone. The Notification further provided that the land area between the Low Tide Line (LTL) and High Tide Line including 500 metres along the tidal influenced water bodies subject to a minimum of 100 Metre on the width of water body, whichever be less is Coastal Regulation Zone area.

(iii) Coastal Zone was categorized into four types based on ecological sensitivity; geomorphological feature and demographic distribution. CRZ-I included the ecological sensitive area; CRZ-II urban or developed area; CRZ-III rural or undeveloped area; and CRZ-IV – Andaman, Nicobar and Lakshadweep Islands.

(iv) This Notification provided the details of activities prohibited and permitted along the coastal zone. Setting up of new industries; expansion of existing industries; manufacture, handling or storage of hazardous substances, fish processing units, mechanized drawal of water; disposal of sewage water and effluents, mining etc. fall under prohibited activities while activities requiring sea front/foreshore facilities like construction activities for defence purposes; construction
for posts & harbours; construction of hotels and resorts was also permitted in certain specified areas.

(v) National Coastal Zone Management Authority both at the central as well as coastal State/UT levels created under the Environment (Protection) Act, 1986 was assigned the task of enforcement and monitoring of the CRZ notification. State and UT level authorities are supposed to prepare Integrated Coastal Zone Management Plans, awareness generation etc. as well.

2. Efficacy of CRZ notification has been assessed differently by different stakeholders. While NGOs – proactive in protecting coastal environment and local communities feel that it is an effective tool and stringent enforcement mechanism should be put in place to implement the notification, the pro-development ideologists – which include industries, tourism sector and Central as well State Govt. to a certain level take it to be a taboo. To sum up the issue it may be said that the working of the notification has been a mix of success and failure. The onus of failure lies on those who are the saviours. It is more the absence of firm resolve and strong will-power to enforce the regulation that has failed the notification rather than the notification itself – as is the case with most of the environmental legislation. CRZ rules are being observed more in the breach rather in adherence and this had the tacit support of the administration – Central or State or both. A number of violations of CRZ area have taken place. Destruction of sensitive ecology such as mangroves, coral reefs, breeding sites of endangered species, illegal constructions in ‘No Development Zone’ without adhering to the norms are some of the major violations of the notification. State Govts. have their own alibi in not having sufficient infrastructure to take strict action against violations.

3. Non-demarcation of High Tide Line even after many years of CRZ notification coming into effect is yet another instance of laxity or lack of commitment on the part of Govt. to implement it. Similar is the case with preparation of Coastal Zone Management Plans as envisaged in the CRZ notification. No State Govt. has so far submitted the revised Coastal Zone Management Plan for the entire State as per the procedure laid down in the CRZ notification.

4. In view of the near non-effective functioning of the notification; several expert committees looking into specific issues relating to it; ever increasing anthropogenic pressure on fragile ecosystems, rising demand for development particularly with reference to housing, tourism, hotel industry; sand mining and industrial projects, rapid rise in coastal pollution etc. led the Govt. to set up a Committee headed by Prof. M.S. Swaminathan to carry out a comprehensive review of the CRZ Notification and suggest suitable amendments to make the coastal regulatory framework consistent with well established scientific principles of Coastal Zone Management.

5. The Swaminathan Committee held detailed discussions and wide ranging consultations with the primary stakeholders and tried to strike a fine balance between conservation and commercial interest to achieve the goal of sustainable development. The Committee also examined various international practices prevailing in developing and developed countries. The Committee felt that a balance must be maintained between development and conservation, i.e., while it is essential to promote socio-economic development, it is equally essential to maintain the unique scientific and cultural values of the coastal sites. The Committee
formulated 12 guiding principles and suggested that these should be central to future decisions on Coastal Zone Management initiatives.

**CMZ NOTIFICATION – 2008**

6. Prof. Swaminathan Committee submitted its report in February, 2005 and the Central Government accepted the recommendations of the Committee in principle for implementation in April, 2005. Accordingly, the Central Government proposed a new legislative framework namely Coastal Management Zone (CMZ) 2008 framework to bring into force superseding the Coastal Management Zone Notification – 1991. The draft Notification was issued on 1st May, 2008 and it was again published on 21st July, 2008 (Annexure).

7. The following are the broad features of the draft Coastal Management Zone (CMZ) Notification, 2008:-

(i) The Notification aims at protection and sustainable development of the coastal stretches and marine environment through sustainable coastal zone management practices based on sound scientific principles taking into account the vulnerability of the coast to natural hazards, sustainable livelihood security for local communities, and conservation of ecologically and culturally significant coastal resources.

(ii) The CMZ area is classified as CMZ-I which is ecologically sensitive area, CMZ-II areas of particular concern, CMZ-III open areas including the coastal waters upto territorial limits and CMZ-IV islands of Andaman & Nicobar Island, Lakshadweep; offshore islands and islands in coastal backwaters.

(iii) For the purpose of management, the CMZ-I areas is proposed to be mapped, notified by the Central Government and managed through Integrated Coastal Zone Management Plans. The CMZ-II area which includes coastal municipalities/corporations, coastal panchayats with population density more than 400 persons per sq km, ports and harbours, tourism areas, airports etc., would be managed through Integrated Coastal Zone Management Plans. In the CMZ-III areas, the activities would be regulated on the seaward side of the setback line, while, developments on the landward side of the setback line can be undertaken as per local town and country planning regulations. In the areas classified as CMZ-IV, the management would be through Integrated Coastal Zone Management Plans.

(iv) The existing dwelling units and other infrastructures areas existing on the seaward side of the setback line will not be disturbed. Further, no activities relating to fishing by traditional community shall be disturbed.

(v) For the purpose of regulating the activities in the CMZ area a setback line on the landward side in the CMZ area is proposed to be demarcated based on vulnerability of the coast to natural and manmade hazards. The mapping of the setback line in the CMZ-I, II and III will be demarcated taking into account the parameters such as elevation, geomorphology, sea level trends and horizontal shoreline displacement.

(vi) For the implementation and enforcement of the notification, there shall be the National and State/Union territory Coastal Zone Management Authorities. A National Board for Sustainable Coastal Zone Management shall be set up to provide policy advice to the Central Government on the matters related to Coastal Zone Management.
A National Institute for Sustainable Coastal Zone Management (NISCZM) shall be set up for assisting the Central Government and the State Governments to prepare the Integrated Coastal Zone Management Plans.

8. Further, the Ministry for the purpose of implementing the recommendations of the Prof. M. S. Swaminathan Committee has initiated a project with the assistance of the World Bank for demarcation of the setback line, capacity building and institutional development, preparation of Integrated Coastal Zone Management Plans for identified stretches in the State of Orissa, West Bengal and Gujarat.

9. This Notification raised a lot of heat and dust/unrest among the coastal communities and they became very restive and agitated, since they felt that it is an attempt on the part of the Government to deprive them of their life and livelihood by displacing them from coastal areas, which has traditionally sustained their life and livelihood. It was in this background that the Committee decided to take up this subject for consideration and examination. Besides inviting memoranda/views/comments from the individuals/organizations and all those concerned with the subject matter the Committee also undertook a study visit to the coastal areas and heard the views of organizations/Unions/individuals at Thiruvananthapuram, Kanyakumari, Chennai and Hyderabad. Some of the main concerns which came to the notice of the Committee on CMZ Notification are as follows:

(i) Almost everywhere, it was asserted before the Committee that CRZ is still a preferred piece of legislation to CMZ Notification, 2008 because the former has succeeded in containing pollution and encroachment along the coastal areas to a large extent, whereas, it was felt that CMZ Notification is a replacement/substitution of CRZ Notification in its amended form with greater possibilities of misuse. One of the greatest apprehensions about the CMZ Notification was that it proposes legalization and encouragement to industrial corporate activities along the coasts in the garb of management methodologies. It was widely apprehended that this Notification will significantly curtail the accessibility of the local community to the shore and sea resources and serve the economic interests of the corporate sector/large investors like tourism industry, refinery, mining etc.

(ii) Local coastal communities almost unanimously voiced that protection of coastal ecology and recognition of basic rights and livelihood of the local communities over the sea and the coast should be at the heart of any coastal zone planning. The fishermen were of the view that coastal management plan should be framed by taking them into confidence and that mere mention in the Notification – “There would be no restriction of fishing or fishery related activities of local communities” is not enough to instill confidence among them. They need to be involved, included and integrated in the future opportunities related to the Coastal Zone. The Committee also feels that in a democratic country like ours the preferred approach should be bottom up – public participation in planning and development rather than top down – decisions made by Govt. and not involving people in inclusive growth opportunities and practices in matters which
have far reaching consequences on a vast population solely dependent on their tradition vocations and way of life. It is primarily keeping in view this concern that peoples’ participation in policy formulation becomes all the more important and inevitable.

(iii) One common complaint that came to the notice of the Committee during its interaction with the various stakeholders was that draft CMZ Notification was not made available to them in their local languages and hence they could not understand the full import and implications of the CMZ Notification. When the Committee enquired about the actual position in this regard from the Ministry of Environment and Forests, it was informed that the translated version of the Notification in local languages had not been widely circulated amongst the local communities and instead they were put on the internet. It was also informed that Centre for Environment Education (CEE) has been assigned the task to organise public consultations to elicit the viewpoint of the local communities.

(iv) The Committee finds that for a community of nearly 250 million people living within a distance of 50 kms. from the coast, CEE could manage to organise 35 public consultations in nine coastal States and was able to interact with 3714 individuals belonging to various stakeholder groups representing – (a) local communities (individuals from coastal communities, Panchayat Members and Fisher/farmer associations) (b) NGOs and Trade Unions (c) public authorities (Municipal Corporation, District State Offices) (d) academic and research organizations local experts/media and corporate bodies (tourism industries etc.). Even the CEE in its report on the public consultation on Coastal Management Zone, 2008 has conceded that time constraints to communicate and organise workshops, rains and travel costs for the participants were the limitations to cover more coastal areas in each State.

(v) The Committee was further informed that the draft CMZ Notification 2008, by including "Notified Industrial Estates", "Special Economic Zones", Green Field Airports" "Power Plants" etc. in CMZ-II, i.e., "Areas of Particular Concern" (APC), is legally permitting take-over of the coast by vested interests and external stakeholders. It was submitted that this notification is far from being a robust legal document aimed at ensuring the safety of coastal & marine resource protection and the livelihood interest and security of coastal communities, it is rather a discriminatory document that allows a number of new stakeholders to enter the coast, while ignoring the claims of those who have been traditionally linked to the sea and have been the “owners” and “protectors” of the coast.

(vi) The roles of the local authorities and State Government is ambiguous in the proposed CMZ Notification, 2008 management structure and methodology. The basic right and opportunity for the local communities or their representatives (Panchayat members) to participate and plan the activities in their local
environment and settlement areas are highly curtailed in the proposed Integrated Coastal Zone Management Plan (ICZMP) process. Roles of public authorities (including various Government Departments like Fisheries, Environment, Municipal Corporation, Block Development Office etc.) have not been defined well, along with the methodology for enforcement, especially in resolving multi-stakeholder conflicts.

(vii) It was also brought to the notice of the Committee that the terminologies defined and the concepts like 'setback line' 'ecologically sensitive area' 'Integrated Coastal Zone Management' (ICZM), mentioned in the CMZ Notification, 2008 are vague and are open to subjective interpretations. Hence clarity is required on these aspects.

(viii) The Committee is of the view that a common management plan for the entire coastal area of the country is not a workable proposition. It feels that it should rather be specifically designed for different states keeping in mind the diverse coastal environments and specific cultures of coastal communities. The Committee is of the view that concerned state governments should have enough participation in formulating the Integrated Coastal Zone Management Plan (ICZMP), the development plan prepared for implementation of the integrated coastal zone management for their states. This view was shared by Prof. Swaminathan as well.

(ix) The CMZ Notification proposes the constitution of a National Board for Sustainable Coastal Zone Management to provide policy advice to the Central Government on matters relating to coastal zone management. The Committee is of the view that although such a Board with experts is a good step, a perusal of the Appendix-IV of the said notification shows that out of thirty two members constituting the Board, only six will be experts. Others will be representatives of certain organizations who would not have much involvement in matters related to the Coastal Zone. The NGOs have been ignored and not given any representation on the Board. The Committee feels that representation of social scientists representatives of NGOs involved in activities related to coastal zone management, fishermen or their representatives need to be represented in the proposed Board.

10. Around 20 per cent of the population in the country dwells in coastal areas and they depend mainly on fisheries to eke out their livelihood. It is estimated that the fishermen population living along the coastal areas of the country is around 67,30,300 as per livestock census of 1992. The Committee is of the opinion that development should be people and not solely economics oriented. As such the concerns of the poor and marginalized sections of the coastal communities, the Committee feels, must be reflected and addressed in State Policy. No attempt should be such as to divorce the people from their cultural life-style and traditional livelihood or interfere with practices that have sustained communities over three millennia and more. The Committee is of the opinion that in a country like ours, where a large number
of populace depend on natural resources for their survival, social dimensions of livelihood security and biodiversity conservation should be pivotal to all decision making pertaining to development or economic considerations of revenue generation. But the Committee is constrained to observe that these dimensions have not been adequately incorporated in implementation of environmental laws and regulations by the State as a result of which interventions by vigilant public interest groups supported by the positive attitude of the judiciary have played a key role in protecting and conserving environmental resources. India’s natural resources – land, water, forest and air are getting depleted and polluted at an alarming pace and the communities who live on them for their livelihood are being constantly marginalized and displaced.

11. The Committee is of the opinion that Govt. should not make haste in implementing the CMZ notification without addressing the conflict of interests between the stakeholders – mainly the fisher folk/coastal communities and all out efforts must be made first to assuage their feelings and meet their concerns which the Committee feels, is not unfound, through education, social mobilization and their active participation and involvement in decision making. Panchayats can play a crucial role in generating awareness among them. For this, Govt. should get the CMZ notification translated into local languages and circulated widely in every village/hamlet so that the local communities are made aware of the actual implications of the notification and are not swayed by hearsay or guided by misgivings about it. Govt. may also seriously think of bringing out a legislation to ensure protection of rights of coastal communities to coastal resources on the lines of the one meant for forest dwellers.

12. The Committee, in view of the above, recommends that the implementation of CMZ notification be kept pending/in abeyance till mechanisms/instruments-executive and legislative are put in place for inclusion and integration of coastal communities through participative, decision making and control instruments.

SUMMARY OF RECOMMENDATIONS/OBSERVATIONS

1. Almost everywhere, it was asserted before the Committee that CRZ is still a preferred piece of legislation to CMZ Notification, 2008 because the former has succeeded in containing pollution and encroachment along the coastal areas to a large extent, whereas, it was felt that CMZ Notification is a replacement/substitution of CRZ Notification in its amended form with greater possibilities of misuse. One of the greatest apprehensions about the CMZ Notification was that it proposes legalization and encouragement to industrial corporate activities along the coasts in the garb of management methodologies. It was widely apprehended that this Notification will significantly curtail the accessibility of the local community to the shore and sea resources and serve the economic interests of the corporate sector/large investors like tourism industry, refinery, mining etc.

2. Local coastal communities almost unanimously voiced that protection of coastal ecology and recognition of basic rights and livelihood of the local
communities over the sea and the coast should be at the heart of any coastal zone planning. The fishermen were of the view that coastal management plan should be framed by taking them into confidence and that mere mention in the Notification – “There would be no restriction of fishing or fishery related activities of local communities” is not enough to instill confidence among them. They need to be involved, included and integrated in the future opportunities related to the Coastal Zone. The Committee also feels that in a democratic country like ours the preferred approach should be bottom up – public participation in planning and development rather than top down – decisions made by Govt. and not involving people in inclusive growth opportunities and practices in matters which have far reaching consequences on a vast population solely dependent on their tradition vocations and way of life. It is primarily keeping in view this concern that peoples’ participation in policy formulation becomes all the more important and inevitable.

3. One common complaint that came to the notice of the Committee during its interaction with the various stakeholders was that draft CMZ Notification was not made available to them in their local languages and hence they could not understand the full import and implications of the CMZ Notification. When the Committee enquired about the actual position in this regard from the Ministry of Environment and Forests, it was informed that the translated version of the Notification in local languages had not been widely circulated amongst the local communities and instead they were put on the internet. It was also informed that Centre for Environment Education (CEE) has been assigned the task to organise public consultations to elicit the viewpoint of the local communities.

4. The Committee finds that for a community of nearly 250 million people living within a distance of 50 kms. from the coast, CEE could manage to organise 35 public consultations in nine coastal States and was able to interact with 3714 individuals belonging to various stakeholder groups representing – (a) local communities (individuals from coastal communities, Panchayat Members and Fisher/farmer associations) (b) NGOs and Trade Unions (c) public authorities (Municipal Corporation, District State Offices) (d) academic and research organizations local experts/media and corporate bodies (tourism industries etc.). Even the CEE in its report on the public consultation on Coastal Management Zone, 2008 has conceded that time constraints to communicate and organise workshops, rains and travel costs for the participants were the limitations to cover more coastal areas in each State.

5. The Committee was further informed that the draft CMZ Notification 2008, by including "Notified Industrial Estates", "Special Economic Zones", Green Field Airports" "Power Plants" etc. in CMZ-II, i.e., "Areas of Particular Concern" (APC), is legally permitting take-over of the coast by vested interests and external stakeholders. It was submitted that this notification is far from being a robust legal document aimed at ensuring the safety of coastal & marine resource protection and the livelihood interest and security of coastal communities, it is rather a discriminatory document that allows a number of new stakeholders to enter the coast, while ignoring the claims of those who have been traditionally linked to the sea and have been the “owners” and “protectors” of the coast.

6. The roles of the local authorities and State Government is ambiguous in the proposed CMZ Notification, 2008 management structure and methodology.
The basic right and opportunity for the local communities or their representatives (Panchayat members) to participate and plan the activities in their local environment and settlement areas are highly curtailed in the proposed Integrated Coastal Zone Management Plan (ICZMP) process. Roles of public authorities (including various Government Departments like Fisheries, Environment, Municipal Corporation, Block Development Office etc.) have not been defined well, along with the methodology for enforcement, especially in resolving multi-stakeholder conflicts.

7. It was also brought to the notice of the Committee that the terminologies defined and the concepts like 'setback line' 'ecologically sensitive area' 'Integrated Coastal Zone Management' (ICZM), mentioned in the CMZ Notification, 2008 are vague and are open to subjective interpretations. Hence clarity is required on these aspects.

8. The Committee is of the view that a common management plan for the entire coastal area of the country is not a workable proposition. It feels that it should rather be specifically designed for different states keeping in mind the diverse coastal environments and specific cultures of coastal communities. The Committee is of the view that concerned state governments should have enough participation in formulating the Integrated Coastal Zone Management Plan (ICZMP), the development plan prepared for implementation of the integrated coastal zone management for their states. This view was shared by Prof. Swaminathan as well.

9. The CMZ Notification proposes the constitution of a National Board for Sustainable Coastal Zone Management to provide policy advice to the Central Government on matters relating to coastal zone management. The Committee is of the view that although such a Board with experts is a good step, a perusal of the Appendix-IV of the said notification shows that out of thirty two members constituting the Board, only six will be experts. Others will be representatives of certain organizations who would not have much involvement in matters related to the Coastal Zone. The NGOs have been ignored and not given any representation on the Board. The Committee feels that representation of social scientists representatives of NGOs involved in activities related to coastal zone management, fishermen or their representatives need to be represented in the proposed Board.

10. Around 20 per cent of the population in the country dwells in coastal areas and they depend mainly on fisheries to eke out their livelihood. It is estimated that the fishermen population living along the coastal areas of the country is around 67,30,300 as per livestock census of 1992. The Committee is of the opinion that development should be people and not solely economics oriented. As such the concerns of the poor and marginalized sections of the coastal communities, the Committee feels, must be reflected and addressed in State Policy. No attempt should be such as to divorce the people from their cultural life-style and traditional livelihood or interfere with practices that have sustained communities over three millenniums and more. The Committee is of the opinion that in a country like ours, where a large number of populace depend on natural resources for their survival, social dimensions of livelihood security and biodiversity conservation should be pivotal to all decision making pertaining to development or economic considerations of revenue generation. But the Committee is constrained to observe that these dimensions have not been adequately incorporated in implementation of
environmental laws and regulations by the State as a result of which interventions by vigilant public interest groups supported by the positive attitude of the judiciary have played a key role in protecting and conserving environmental resources. India’s natural resources – land, water, forest and air are getting depleted and polluted at an alarming pace and the communities who live on them for their livelihood are being constantly marginalized and displaced.

11. The Committee is of the opinion that Govt. should not make haste in implementing the CMZ notification without addressing the conflict of interests between the stakeholders – mainly the fisher folk/coastal communities and all out efforts must be made first to assuage their feelings and meet their concerns which the Committee feels, is not unfound, through education, social mobilization and their active participation and involvement in decision making. Panchayats can play a crucial role in generating awareness among them. For this, Govt. should get the CMZ notification translated into local languages and circulated widely in every village/hamlet so that the local communities are made aware of the actual implications of the notification and are not swayed by hearsay or guided by misgivings about it. Govt. may also seriously think of bringing out a legislation to ensure protection of rights of coastal communities to coastal resources on the lines of the one meant for forest dwellers.

12. The Committee, in view of the above, recommends that the implementation of CMZ notification be kept pending/in abeyance till mechanisms/instruments-executive and legislative are put in place for inclusion and integration of coastal communities through participative, decision making and control instruments.

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MINUTES

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V
(FIFTH MEETING)

The Committee met at 11.00 a.m. on Friday, the 12th September, 2008 in Committee Room 'A', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

1. Dr. V. Maitreyan - Chairman

RAJYA SABHA
2. Shri Suryakanthbhai Acharya
3. Shri Bhagirathi Majhi
4. Shri Kamal Akhtar
5. Shri Saman Pathak
6. Shri Jabir Husain
7. Shri D. Raja
8. Dr. Ejaz Ali
At the outset, the Committee discussed its future programme and decided to take up for consideration the following subjects in order of priority (i) Coastal Management Programmes; (ii) Atomic Energy in Power Generation; and (iii) Role of Science & Technology towards Rural application and Rural upliftment. The Committee directed the Secretariat to obtain necessary documents on the Coastal Management Programmes viz. Swaminathan Committee Report on Review of Coastal Regulation Zone Notification, 1991, recent Notification on the subject, background note for the consideration of the Committee. The Committee then directed the Secretariat to prepare Action Taken Reports of the concerned Department/Ministries on action taken by the government on the recommendations contained in the Reports on Demands for Grants (2008-09) of the respective Departments/Ministries and decided to hold its next meeting in this regard in the month of October, 2008.

3. The Committee further decided to assemble at Bagdogra on 25th September, 2008 instead of Delhi as decided earlier for its forthcoming study visit to Gangtok, Guwahati, Shillong & Kolkata and directed the Secretariat to take further necessary action in this regard.

4. The Committee then adjourned at 11.45 a.m.

IX (NINTH MEETING)

The Committee met at 11.00 a.m. on Tuesday, the 11th November, 2008 in Committee Room ‘B’, Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

1. Dr. V. Maitreyan - Chairman
   RAJYA SABHA
2. Shri Suryakantbhai Acharya
3. Shri Bhagirathi Majhi
4. Shri Kamal Akhtar
5. Shri Saman Pathak
6. Shri D. Raja
7. Shri Pankaj Choudhary

LOK SABHA
8. Shri Akbar Ahmad Dumpy
9. Shri Francis Fanthome
10. Shri Brahmananda Panda
11. Shri Jaysingrao Gaikwad Patil
12. Shri Pratik P. Patil
13. Shri K.C. Singh "Baba"
15. Shri Aruna Kumar Vundavalli
16. Shri Mitrasen Yadav
17. Shri Sita Ram Yadav

SECRETARIAT
Smt. Agnes Momin George, Joint Secretary
Shri A.K. Gandhi, Joint Director
Shri V.S.P. Singh, Deputy Director
Shri S. Rangarajan, Assistant Director

WITNESS
1. Shri Vijai Sharma, Secretary, Ministry of Environment & Forests
2. Shri J. M. Mauskar, Additional Secretary
3. Shri M. B. Lal, Addl. Director General (FC)
4. Shri Ansar Ahmad, Inspector General Forests (FC)
5. Dr. Nalini Bhat, Advisor
6. Dr. A. Senthil Vel, Additional Director

At the outset, Chairman welcomed the Members and the Secretary and officials of the Ministry of Environment & Forests to the meeting of the Committee. He requested the Secretary, Ministry of Environment & Forests to highlight the initiatives taken by the Ministry for protecting and conserving the coastal environment. He also desired to know the measures required to be adopted to identify the vulnerable coastal regions and ensuring strengthening of the livelihood security of coastal populations. The Secretary, Ministry of Environment & Forests, then made a visual presentation on the subject. Members thereafter, sought clarifications on the points arising out of the presentation to which the witnesses replied.

The witnesses then withdrew.

A verbatim record of the proceedings was kept.

The Committee further discussed its proposed study visit to Eastern Coastal States and UT of Andaman Nicobar Islands, as decided by the Committee in its previous meeting, to have in-depth knowledge and to interact with the people affected in the Coastal States and UTs in connection with the Coastal Management Programmes and to different institutes/bodies/centers, etc., within the administrative control of the Ministries/Departments falling under the purview of the Committee to acquaint itself with their working and problems being faced by them. The Committee decided to undertake study visit to Thiruvananthapuram, Kanyakumari, Chennai, Port Blair and Hyderabad from 28th November to 5th December, 2008. The Committee directed the Secretariat to take necessary action in this regard.

The Committee then adjourned at 12.50 p.m. to meet again at 02.00 p.m. on 26th November, 2008.
The Committee met at 2.00 p.m. on Wednesday, the 26th November, 2008 in Committee Room 'A', Ground Floor, Parliament House Annexe, New Delhi.

1. **Dr. V. Maitreyan - Chairman**  
   **RAJYA SABHA**

2. Shri Suryakantbhai Acharya  
3. Shri Bhagirathji Majhi  
4. Shri Rajiv Pratap Rudy  

**LOK SABHA**

5. Dr. Sujan Chakraborty  
6. Shri Thupstan Chhewang  
7. Shri Akbar Ahmea Dumpy  
8. Shri Francis Fanthome  
9. Shri Brahmananda Panda  
10. Shri Pratik P. Patil  
11. Shri Bachi Singh 'Bachda' Rawat  
12. Shri K.C. Singh "Baba"  
14. Shri Aruna Kumar Vundavalli  
15. Shri Mitrasen Yadav  
16. Shri Sita Ram Yadav  

**SECRETARIAT**  
Smt. Agnes Momin George, Joint Secretary  
Shri A.K. Gandhi, Joint Director  
Shri V.S.P. Singh, Deputy Director  
Shri S. Rangarajan, Assistant Director  

**WITNESS**  
Prof. M.S. Swaminathan, M.P.

2. At the outset, the Chairman welcomed Shri Rajiv Pratap Rudy, M.P. newly nominated to the Committee i.e. w.e.f. 24th October, 2008.

3. The Chairman then welcomed the Members and Prof. M.S. Swaminathan, Member of Parliament to the meeting of the Committee. The Chairman apprised Members that Prof. Swaminathan had been the Chairman of the Expert Committee constituted to Review the Coastal Regulation Zone, Notification, 1991. Thereafter, he requested Prof. Swaminathan to highlight the challenges and dangers that Coastal Zone/ Coastal area is facing and the initiatives that could be taken for the purpose of protecting and conserving the coastal environment. He also desired to know the measures required to be adopted to identify the vulnerable coastal regions and ensuring strengthening of the livelihood security of coastal populations. Prof. Swaminathan made a presentation on the subject. Members thereafter, sought clarifications on the points arising out of the presentation to which he replied. The witness then withdrew.

   A verbatim record of the proceedings was kept.

4. The Committee then adjourned at 3.15 p.m.
XI
(ELEVENTH MEETING)

The Committee met at 11.00 a.m. on Tuesday, the 30th December, 2008 in Committee Room 'A', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

1. Dr. V. Maitreyan - Chairman

RAJYA SABHA

2. Shri Suryakantbhai Acharya
3. Shri Bhagirathi Majhi
4. Shri Kamal Akhtar
5. Shri Saman Pathak
6. Shri D. Raja

LOK SABHA

7. Dr. Sujan Chakraborty
8. Shri Brahmananda Panda
9. Shri Pratik P. Patil
10. Shri Bachi Singh 'Bachda' Rawat
11. Shri Aruna Kumar Vundavalli
12. Shri Mitrasen Yadav
13. Shri Sita Ram Yadav

SECRETARIAT

Shri A.K. Gandhi, Joint Director
Shri V.S.P. Singh, Deputy Director

WITNESS

Representatives from the Ministry of Earth Sciences

1. Dr. Shailesh Nayak, Secretary
2. Smt. Villasini Ramachandran, A.S. &F.A
3. Shri D.P. Singh, Joint Secretary
4. Dr. K. Somasundar, Scientist 'E'
5. Shri P. Madeswaran, Scientist 'E'
6. Dr. S.K. Das, Scientist 'G'

Representative from India Meteorological Department (IMD)

Shri Ajit Singh Tyagi, DG

Representative from Integrated Coastal and Marine Area Management (ICMAM)

Dr. B.R. Subramanian, Project Director

Representatives from National Institute of Ocean Technology (NIOT)

1. Dr. S. Kathiroli, Director
2. Shri Rajat Roy Chaudhary, Scientist 'F'

Representative from National Institute of Oceanography (NIO)

Dr. S. Shetye, Director

Representative from Indian National Centre for Ocean Information Services (INCOIS)

Dr. Srinivasa Kumar, Scientist 'E'

Representative from Centre for Marine Living Resources and Ecology (CMLRE)

Dr. V.N. Sanjeevan, Director
Representative from Central Pollution control Board (CPCB)
Shri P.M. Ansari, Additional Director
Representative from Ministry of Environment & Forests
Dr. A. Senthilvel, Director
Representative from Central Water Commission (CWC)
Dr. R. Simre, Director

2. At the outset, the Chairman welcomed the Members and the Secretary and officials of the Ministry of Earth Sciences to the meeting of the Committee. He requested the Secretary, Ministry of Earth Sciences to highlight the challenges and dangers that Coastal Zone/ Coastal area is facing and the initiatives that could be taken for the purpose of protecting and conserving the coastal environment. He also desired to know the measures required to be adopted to identify the vulnerable coastal regions and ensuring strengthening of the livelihood security of coastal populations. The Secretary, Ministry of Earth Sciences, then made a visual presentation on the subject. Members thereafter, sought clarifications on the points arising out of the presentation to which the witnesses replied.

The witnesses then withdrew.

A verbatim record of the proceedings was kept.

3. The Committee decided to hear the views of representatives of Centre for Environmental Education (CEE), Ahmedabad on the subject of Coastal Management Programmes at its next meeting. The Committee directed the Secretariat to take necessary action in this regard.

4. The Committee then adjourned at 12.40 p.m. to meet again at 11.30 a.m. on 13th January, 2009.

XII
(TWELFTH MEETING)

The Committee met at 11.30 a.m. on Tuesday, the 13th January, 2009 in Committee Room 'B', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT
1. Dr. Sujan Chakraborty  ------------   In the Chair*
RAJYA SABHA
2. Shri Suryakantbhai Acharya
3. Shri Bhagirathi Majhi
4. Shri Kamal Akhtar
5. Shri Saman Pathak
6. Shri Jabir Husain
7. Shri D. Raja
8. Shri Rajiv Pratap Rudy
LOK SABHA
9. Shri Thupstan Chhewang
10. Shri Pankaj Choudhary
11. Shri Francis Fanthome
12. Shri A. Venkatesh Naik
13. Shri Brahmananda Panda
14. Shri Jaysingrao Gaikwad Patil
15. Shri Pratik P. Patil
At the outset, the Chairman welcomed the Members and Dr. Shailaja Ravindranath, Regional Director, Centre for Environment Education (CEE), Ahmedabad and Dr. A. Senthilvel, Additional Director, Ministry of Environment & Forests to the meeting of the Committee. He requested Dr. Shailaja to highlight the modalities/procedures adopted to invite comments from NGOs and interacting with local communities; efforts made by CEE to reach wider sections of NGOs and local communities; main concerns voiced by them; how real those concerns are and in what manner those concerns could be addressed, etc. He also desired to know the measures required to be adopted to identify the vulnerable coastal regions and ensuring strengthening of the livelihood security of coastal populations. Dr. Shailaja, then made a presentation on the subject. Members thereafter, sought clarifications on the points arising out of the presentation to which the witnesses replied.

The witnesses then withdrew.

A verbatim record of the proceedings was kept.

3. The Chairman informed the Committee that "The Protection and Utilisation of Public Funded Intellectual Property Bill, 2008" has been referred to the Committee by the Hon'ble Chairman, Rajya Sabha for examination and report. The Committee decided to have an internal discussion on the said Bill at its next meeting. The Committee directed the Secretariat to take necessary action in this regard.

4. The Committee then adjourned at 12.40 p.m. to meet again at 02.00 p.m. on 20th January, 2009.

**XVI**

**(SIXTEENTH MEETING)**

The Committee met at 11.00 a.m. on Tuesday, the 10th February, 2009 in Room No. ’62’, First Floor, Parliament House, New Delhi.

**PRESENT**

1. Dr. Sujan Chakraborty ------------ In the Chair*

**RAJYA SABHA**

2. Shri Bhagirathi Majhi
3. Shri Kamal Akhtar
4. Shri Saman Pathak
5. Shri Jabir Husain
In the absence of Chairman, Dr. Sujan Chakraborty chaired the meeting.

WITNESS

Representatives from the Survey of India, Dehradun
i) Maj. General R. S. Tanwar, Additional Surveyor General
ii) Shri S. V. Singh, Deputy Director
iii) Shri D.K. Kar, Suptdg. Surveyor

Representatives from the Space Applications Centre, Ahmedabad
i) Dr. Ajai, Group Director
ii) Shri Santanu Bhatawdker, Officer on Special Duty
iii) Dr. Rajawat, A.S., Scientist

At the outset, the Chairman welcomed the Members and Additional Surveyor General and officials of Survey of India, Dehradun to the meeting of the Committee. He requested the Additional Surveyor General to highlight the details of work assigned to them; the time-frame within which the assignment is to be completed and the modalities/procedures adopted to accomplish those tasks. He also desired to know the challenges that the organisation faces while carrying out its responsibilities and the initiatives that could be taken for the purpose of dealing with those challenges. The Additional Surveyor General, then made a presentation on the subject. Members thereafter, sought clarifications on the points arising out of the presentation to which the witness replied.

The Chairman, thereafter, welcomed the Group Director and officials of Space Applications Centre, Ahmedabad to the meeting of the Committee. He requested the Group Director to highlight the details of work assigned to them; the time-frame within which the assignment is to be completed and the modalities/procedures adopted to accomplish those tasks. He also desired to know the challenges that the Centre faces while carrying out its responsibilities and the initiatives that could be taken for the purpose of dealing with those challenges. The Group Director, then made a visual presentation on the subject. Members thereafter, sought clarifications on the points arising out of the presentation to which the witness replied.

The officials then withdrew.

A verbatim record of the proceedings was kept.

The Committee then adjourned at 1.30 p.m.
The Committee met at 11.00 a.m. on Friday, the 6th March, 2009 in Room No. '121', First Floor, Parliament House Annexe, New Delhi.

PRESENT
1. Dr. V. Maitreyan - Chairman

RAJYA SABHA
2. Shri Bhagirathi Majhi
3. Shri Kamal Akhtar
4. Shri Jabir Husain
5. Shri D. Raja

LOK SABHA
6. Shri Jashubhai Dhanabhai Barad
7. Shri Akbar Ahmad Dumpy
8. Shri Francis Fanthome
9. Shri A. Venkatesh Naik
10. Shri Brahmananda Panda
11. Shri Jaysingrao Gaikwad Patil
12. Shri Pratik P. Patil
13 Smt. Jayaben B. Thakkar
14. Shri Sita Ram Yadav

SECRETARIAT
Smt. Agnes Momin George, Joint Secretary
Shri A.K. Gandhi, Joint Director
Shri V. S. P. Singh, Deputy Director
Shri S. Rangarajan, Assistant Director

2. At the outset, the Committee took up for consideration its draft Two Hundred and second Report pertaining to "Coastal Management Programmes". The Committee adopted the report with certain additions/modifications as suggested by some Members.

3. Thereafter, the Chairman apprised the Committee that the Committee has dealt with all the matters at hand except "The Protection and Utilization of Public Funded Intellectual Property Bill, 2008" which has been referred to the Committee by the Hon'ble Chairman, Rajya Sabha for examination and report on 18th December, 2008. He further informed that although the Committee had heard the Secretary, Department of Bio-technology in this regard, but it will not be possible to present report thereon without hearing the views of experts/NGOs/individuals concerned with the subject matter of the Bill, within the stipulated time. The Committee, thereafter, authorised the Chairman of the Committee to seek permission for extension of time for six months w.e.f. 17th March, 2009, from Hon'ble Chairman, Rajya Sabha for the presentation of the report on the said Bill. The Committee directed the Secretariat to take necessary action in this regard.

4. The Committee then adjourned at 11.45 a.m.
MINISTRY OF ENVIRONMENT AND FOREST

New Delhi, the 1st May, 2008

S.O.No.1070(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 coastal stretches were declared Coastal Regulation Zones (CRZ) and restrictions were imposed on the setting up and expansion of industries, operations and processes in the said Zones 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 its 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 Order No.15(8)/2004-IA-III, dated the 19th July, 2004 under the Chairmanship of Prof. M. S. Swaminathan, with experts in the areas of environmental law, marine biodiversity, 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 livelihood security of coastal populations is strengthened;
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 force 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 for ensuring protection of coastal population and structures from risk of inundation due to natural hazards; and for ensuring that the livelihoods of coastal populations are strengthened; by superseding the said Coastal Regulation Zone, Notification, 1991;

Now, therefore, 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) read with sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 and in supersession of the notification published vide S.O.114(E) dated the 19th February, 1991, except as respects things done or omitted to be done before such supersession, the Central Government proposes to issue a notification to be known as the Coastal Management Zone (CMZ) Notification, 2008, 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.

* “And whereas, in addition to the above the Central Government has decided to consider the proposal for developing green field airports and to undertake expansion and modernisation of existing airports in the coastal areas, without compromising environmental considerations.”.

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

DRAFT NOTIFICATION

1. (i) This notification may be called the Coastal Management Zone Notification, 2008.

   (ii) It shall come into force on 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 coastal zone management practices based on sound scientific principles taking into account the vulnerability of the coast to natural hazards, sustainable livelihood security for local communities, and conservation of ecologically and culturally significant coastal resources.

3. Definitions.- In this Notification, unless the context otherwise requires,-

(a) “Coastal Zone” means 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, up to the landward boundary of the local self-government or local authority abutting the sea coast, provided that in case of ecologically and culturally sensitive areas, the entire biological or physical boundary of the area may be included, as specified under the provisions of Environment Protection Act, 1986;

1. “Integrated Coastal Zone Management (ICZM)” means a process by which decisions are made for protection of coastal population and infrastructure, protection and conservation of coastal and marine areas and resources and sustainable development;
2. “Integrated Coastal Zone Management Plan (ICZMP)” is the land use plan or development plan prepared for implementation of the Integrated Coastal Zone Management;
3. “Local Self Government or Local Authority” means a village Panchayat, or a urban local body, or any other body or authority, by whatever 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 or inland tidal water having tidal action.
4. ‘Setback Line’ means a line demarcated along the coast, based on its vulnerability to sea-level rise, flooding and shore line changes as per Guidelines given in this notification in Appendix -I.
5. “Ecologically Sensitive Areas” are those areas of the coastal zone that play 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.

4. Categorization of the Coastal Zone.- For the purposes of management and regulation, the coastal zone shall be divided into four categories, namely:-
1. Coastal Management Zone - I (CMZ-I) shall consist of areas designated as Ecologically Sensitive Areas (ESA), an indicative list is given 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 and, or strategically important areas. The administrative boundaries of these “Areas of Particular Concern” would be boundaries of CMZ - II. A 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 and tidal influenced inland water bodies, that is, all areas excluding those classified as CMZ - I, II and IV.

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

1. 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 CMZ - IV at the option of the Local Authority; otherwise they would be included in CMZ - III. Once exercised, the option of the Local Authority would not be subject to change.

5. (i) National Board for Sustainable Coastal Zone Management.

This Board consisting of not more than thirty two Members shall have the mandate to provide policy advice to the Central Government on matters relating to coastal zone management, but shall not undertake regulatory functions. 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 years only.

(ii) National and State or UT Coastal Zone Management Authorities

The National and State or Union territory Coastal Zone Management Authorities set up under the Environment (Protection) Act, 1986, shall be the Coastal Zone Management Authorities.


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

1. Notification of the Setback Line: The Setback Line, for the entire coast, excluding CMZ-I and CMZ - IV areas, will be notified in one or
more stretches at a time in a map on cadastral scale by the Central Government. For this purpose, the Central Government shall 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 the competent and established scientific institutions specializing in earth surveys and mapping, among a set of such institutions to be notified by the Central Government. Till the Setback Line in respect of area under each local authority as per these technical guidelines is notified by the Central Government the provisions of the Coastal Regulation Zone Notification, 1991 shall prevail.

(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 jointly with the concerned State Government or Union territory Administration, with the technical assistance provided by the National Institute for Sustainable Coastal Zone Management or 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 or Union territory Coastal Zone Management Authority concerned on the basis of an Integrated Coastal Zone Management Plan (ICZMP) to be prepared by the concerned State or Union territory Administration with the help of National Institute of Sustainable Coastal Zone Management or one or more competent and established scientific research institutions specializing in coastal resources management, and notified by the Central Government and notified under Environment (Protection) Act, 1986. The Integrated Coastal Zone Management Plans prepared for CMZ-I areas would be endorsed by the Central Government. The ICZMPs prepared shall ensure proper protection and conservation of all ecological entities within the notified ecologically sensitive areas keeping in view the safety and livelihood needs of the local communities and essential development. There shall be no restriction in the fishing and fisheries related activities of local communities living in the area. The implementation of the ICZMPs by the State Government or Union territory Administration shall be monitored by the concerned State or Union territory Coastal Zone Management Authority and by the National Coastal Zone Management Authority.

* Provided that the projects pertaining to the development of green field airports and expansion and modernisation of existing airports shall be undertaken on case to case basis based on detailed scientific study incorporating adequate environmental safeguard measures required for neutralising damage to the coastal environment.”.

(iii) Coastal Management Zone – II: In the administrative boundaries of
areas of the Coastal Municipalities or Corporation and coastal Panchayat with population density of more than 400 persons per sq. km, activities shall be regulated based on an Integrated Coastal Zone Management Plan approved by the Central Government. The activities proposed on the seaward side of the setback line in the above administrative boundaries shall be regulated to ensure that no further development takes place other than foreshore requiring facilities and basic infrastructure.

The development on the landward side of the setback line shall be as per the local town and country planning rules as existed on the day of this notification. The Integrated Coastal Zone Management Plan prepared for the above areas shall take into account the guidelines laid down in Appendix-V.

With regard to economically and culturally important areas as identified by the concerned State or Union territory Governments, the activities shall be regulated as per Integrated Coastal Zone Management Plan prepared. The Integrated Coastal Zone Management Plan will be implemented by the concerned State or Union territory Governments after the plans are approved by the Central Government.

With regard to strategically important areas, the Ministry of Defence would prepare an Integrated Coastal Zone Management Plan and submit to the Ministry of Environment and Forests. Such plans would be accorded clearance by a Special Committee constituted by the Central Government.

(iii) Coastal Management Zone - III : The activities that may be permitted or prohibited on the seaward side of the setback line and agencies responsible are given in Appendix-VI. The existing dwelling units and other infrastructure existing on the seaward side of the setback line shall not be disturbed/relocated. No activities relating to fishing by traditional communities shall be disturbed.

(iv) Coastal Management Zone – IV: All activities shall conform to the approved Integrated Coastal Zone Management Plans, which shall be determined in each case by the concerned State or Union territory Coastal Zone Management Authority. While, preparing the Integrated Coastal Zone Management Plans it shall be ensured that no developments are permitted in the corals, mangroves, breeding and spawning of endangered species other than those minimum essential activities required for local communities.

7. Operation of the Coastal Regulation Zone Notification 1991.-

The Coastal Regulation Zone Notification, 1991 shall cease to operate within:
(a) CMZ - I area, from the date of Notification of the concerned Integrated Coastal Zone Management Plan.

(b) CMZ - II area, from the date of Notification of the Setback Line and approval of Integrated Coastal Zone Management Plan.

(c) CMZ - III area, from the date of Notification of the Setback Line.

(d) CMZ - IV area, from the date of Notification of the concerned ICZMP.

Appendix-I

SETBACK LINE

The Setback Lines in the coastal management zones categorised 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 four parameters are taken into account: elevation, geomorphology, sea level trends, and horizontal shoreline displacement (erosion or accretion). 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 with contour intervals of 0.5 and 1 meter.

(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 the reports of the United Nations Inter-Governmental Panel on Climate Change (IPCC).

(iv) Horizontal shoreline displacement: The erosion or 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 shall be estimated (median estimate) over the next 100 years.
Further detailed Technical Guidelines for delineation of the Setback Line may be provided by the Central Government in the Ministry of Environment and Forests.

The setback line shall be demarcated based on the above parameters using the guidelines as approved by the Ministry for CMZ-II and III areas on cadastral scale by NISCM or any other agency authorised by the Ministry within a period of two years from the date of issue of this notification.

Appendix-II

CMZ - I: INDICATIVE LIST OF ECOLOGICALLY SENSITIVE AREAS (ESA)

1. Mangroves
2. Coral reefs
3. Sand Beaches and Sand Dunes
4. Mudflats
5. Marine wildlife protected areas under the Wildlife (Protection) Act, 1972
6. Coastal freshwater bodies such as creeks, lakes etc
7. Salt Marshes
8. Turtle nesting grounds
9. Horse shoe crabs habitats
10. Sea grass beds
11. Sea weed beds
12. Nesting grounds of birds

Appendix- III

CMZ - II: THE INDICATIVE LIST OF AREAS OF PARTICULAR CONCERN

1. Coastal Municipalities/Corporations (the entire notified area)
2. Coastal Panchayats with population density more than 400 persons per sq km (the entire notified area) as per the latest Census of India.
3. Ports and Harbours
4. Notified Tourism Areas
5. Mining sites
6. Notified Industrial Estates
7. Foreshore facilities for Special Economic Zones
8. Heritage areas
10. Defence areas/installations
11. Power Plants
12. *Green field airports and expansion and modernization of existing
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 and 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 from Indian Space Research Organization - 1

7. Representative of the Ministry of Urban Development - 1

8. Representative of the Ministry of Panchayati Raj - 1

9. Representatives of community based organizations of
the mainland coastal population - 3

10.

Representatives from fishers (1 male and 1 woman) - 2

11. Representatives from aquaculture, tourism, industries, mining, ports, sectors - 4

12. Representatives of coastal Rural District Panchayats - 3

13. Representatives of coastal Urban Local Authorities - 3

14. Representatives of Andaman and Nicobar and Lakshadweep Islands - 3

Appendix-V

GUIDELINES FOR PREPARATION OF INTEGRATED MANAGEMENT PLAN FOR CMZ II AREAS

1. The entire notified Corporation, Municipality, Panchayat, revenue area, shall be the outer boundary of the APC.
2. ICZMPs shall be prepared for these areas indicating all present and future developments, conservation and preservation schemes.
3. The ICZMP shall address vulnerability to human life and property based on setback lines prepared by Ministry of Environment and Forests.
4. No constructions shall be permitted on the seaward side of any existing (as on 2008) approved building or a tarred or surfaced road in the area.
5. All the existing roads including the internal roads shall be strengthened, as these roads shall serve for the purpose of livelihood, communication, relief and evacuation measures particularly for fisher communities.
6. Adequate cyclone shelters shall be constructed taking into account the population of the area.
7. The new schools, market areas and other public facilities where large number of public congregate shall be located beyond the vulnerable area.
8. Along the seaward side sufficient bio shield with local vegetation, trees including mangroves shall be planted
9. The beaches shall be left free of any development.
10. Appropriate coastal protection structures be constructed where ever required on a scientific basis
11. New houses and settlements shall be planned on landward of the setback line.
12. Sand dunes, being natural speed breakers in the event of hazards, shall be maintained or regenerated by planting shrubs or through appropriate measures.
13. All the areas notified by the Ministry of Environment and Forests as CMZ I shall be clearly demarcated in the plan for their conservation.
14. The ICZMPs shall be approved by the proposed NISCM of the Ministry or any other authorized authorities as approved by the Ministry.
15. There shall be no regulation with regard to fishing and fishery related activities.
16. The enforcement and monitoring will be the responsibility of the concerned State or Union territory Coastal Zone Management Authorities.

Appendix –VI

CMZ III: PERMISSIBLE DEVELOPMENTAL ACTIVITIES ON THE SEAWARD SIDE OF THE SETBACK LINE

1. Activities, which are permitted by the local or concerned authorities without CMZ clearance
   1. Boating, shipping and navigation.
   2. Fisheries including traditional fish processing, ice plants and ice crushing facilities.
   3. Mariculture including hatcheries and traditional aquaculture.
   4. Agriculture and horticulture.
   5. Public toilets and rain or cyclone shelters.
   6. Repair of existing buildings or infrastructure including reconstruction activities.

(ii) Activities to be permitted with the approval of State or Union territory Coastal Zone Management Authority

1. Construction of boat jetties and fishing harbours to be approved with Environmental Impact Assessment.
2. Saltpans-making salt by solar evaporation of seawater.
3. Temporary construction for tourism facilities.
4. Water sports and recreation facilities.
5. Discharge facilities of treated effluents compiling with the norms.
6. Forest related activities.
7. Boat building including repair and re-fuelling facilities.

(iii) Activities that can be permitted with Environmental Impact Assessment and Environmental Management Plan to be approved by Ministry of Environment and Forests.
1. Integrated port, harbour, jetties and moored facilities.
2. Dredging and disposal of dredged materials.
3. Reclamation within port limits and for coastal protection.
4. Coastal Protection measures including mangroves and other bioshields.
5. Bridges and sea links and approaches and reclamation therefor.
6. Bunding for the purpose of preventing coastal erosion, salinity ingress, maintenance of waterways.
7. Hydrocarbon exploration and extraction.
8. Mining of placer minerals and offshore mining.
9. Constructions of communication, power supply, lighthouses and water supply.
10. Pipelines for transfer of petroleum or chemicals, storage facilities for storage of petroleum or chemical products and regasification facilities.
11. Defence related projects.
12. Shipbuilding yards.

(m) Ship-breaking in existing locations.

(n) Non conventional energy including windmills.

(o) Any other activity which requires foreshore facilities.

*(p) Green field airports and expansion and modernization of existing airports

(iv) All other activities not listed above are prohibited.

{F. No. 11-83/2005-IA.III}

(Dr. Nalini Bhat)

Scientist ‘G’


[To be published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub-section (ii)]

MINISTRY OF ENVIRONMENT AND FORES

New Delhi, the 9th May, 2008.

NOTIFICATION
S.O.1120 (E). Whereas a draft of the notification of the Government of India in the Ministry of Environment and Forests number S.O. 1070(E), dated the 1st May, 2008 under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-rule (3) of rule 5 of the Environment (Protection) Rules,1986, titled as the Coastal Management Zone (CMZ) Notification, 2008 (hereinafter referred to as the said notification), inviting objections and suggestions from all persons likely to be affected thereby within a period of sixty days from the date on which copies of the Gazette in which that notification was made available to the public was published in the Gazette of India, Part II, Section 3, Sub-Section (ii) on the 1st May, 2008;

And Whereas the Central Government has decided to consider the request for developing green field airports and other incidental matters relating thereto;

Now, therefore, 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) read with sub-rule (3) of rule 5 of the Environment (Protection) Rules,1986, the Central Government hereby makes the following amendments in the said draft notification, namely:

AMENDMENTS

1. In the said notification, in the preamble, after paragraph 7, the following paragraph shall be inserted:

“And whereas, in addition to the above the Central Government has decided to consider the proposal for developing green field airports and to undertake expansion and modernisation of existing airports in the coastal areas, without compromising environmental considerations.”.

2. In the said notification, in paragraph 6, in sub-paragraph (ii) relating to Coastal Management Zone , the following proviso shall be inserted at the end, namely:

“Provided that the projects pertaining to the development of green field airports and expansion and modernisation of existing airports shall be undertaken on case to case basis based on detailed scientific study incorporating adequate environmental safeguard measures required for neutralising damage to the coastal environment.”.

3. In the said notification, in Appendix-III, after item (k), the following item shall be inserted, namely:

“l) Green field airports and expansion and modernisation of existing airports.”.

4. In the said notification, in Appendix-VI, in sub-heading (iii) relating to “Activities that can be permitted with Environmental Impact Assessment and Environmental Management Plant to be approved by Ministry of Environment and Forests.”, after
item (o), the following item shall be inserted, namely:

“(p) Green field airports and expansion and modernisation of existing airports.”.

{F. No. 11-83/2005-IA.III}

(Dr. Nalini Bhat)

Scientist ‘G’

Note..The principal draft notification was published in the Gazette of India vide number S.O.1070 (E). dated the 1st May, 2008.
## Annexure-II

**List of individuals / institutions/ organizations who sent suggestions/views on Coastal Management Programmes**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Names &amp; Addresses of Individuals/Experts/Organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Olencio Fernandes, Convenor Nuvem Civic And Consumer Forum, H.N0. 99/0, Belloy, Nuvem, Salcete, Goa</td>
</tr>
<tr>
<td>2.</td>
<td>Jairam I. Dialani Shipyards Association of Goa, Vasco-da-Gama, Goa</td>
</tr>
<tr>
<td>3.</td>
<td>Chairman Vadrai Macchimar Sarvoday Sahakari Society Ltd.</td>
</tr>
<tr>
<td>4.</td>
<td>President Digambarpur Angikar, Digambarpur, Via Kashinagar, Block Patharpratima, Dist. South 24 Pgs., Sundarban, West Bengal.</td>
</tr>
<tr>
<td>5.</td>
<td>Savapati Contai-I Panchayat Samity, P.O. Contai, Dist. Purba Medinipur</td>
</tr>
<tr>
<td>6.</td>
<td>Hemalata, General Secretary All India Fishers &amp; Fisheries Workers' Federation (AIFWWF), BT Ranadive Bhawan, 13-A Rouse Avenue, N.D.</td>
</tr>
<tr>
<td>8.</td>
<td>Antony T. Arthial Puraidom Marianad Puthukurichy P.O. Thiruvananthapuram, Kerala-695303</td>
</tr>
<tr>
<td>9.</td>
<td>Capt. J. Rama Rao VSM, FIE, Indian Navy (Retd.) 540, Road No. 12, Banjara Hills Hyderabad-500034</td>
</tr>
<tr>
<td>10.</td>
<td>Member Secretary Chennai Metropolitan Development Authority, Thalamuthu Natarajan Building, No. 1, Gandhi Irwin Road, Egmore, Chennai-600008</td>
</tr>
<tr>
<td>12.</td>
<td>Matanhy Saldanha, Ex-MLA, Villa Saldanha, Cansaulim, Goa,</td>
</tr>
<tr>
<td>13.</td>
<td>C.V. Ravindranath Kannur-670001, Kerala</td>
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<td>Name</td>
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<td>15</td>
<td>P.B. Sahasranaman</td>
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<td>16</td>
<td>Priya Sharma</td>
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<td>17</td>
<td>G.S. Gill</td>
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<td>18</td>
<td>Addl. Secretary</td>
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<td>19</td>
<td>Abhinav Nautiyal</td>
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<td>20</td>
<td>Anil Gachke</td>
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<td>21</td>
<td>Dr. Joseph. P. Kavalam</td>
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<td>22</td>
<td>Prof. K.K. Ghosh</td>
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<td>23</td>
<td>Jayaram Pattnaik</td>
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<td>24</td>
<td>John A Amalan, LGC.</td>
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<tr>
<td>25</td>
<td>Gilbert Rodrigo</td>
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<tr>
<td>26</td>
<td>Anton Gomez, President</td>
</tr>
<tr>
<td>27</td>
<td>Jesu Rethinam, Convenor</td>
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<td>28</td>
<td>P. Tanya</td>
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<td>29</td>
<td>M. Ananda Rao</td>
</tr>
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<td>30</td>
<td>D. Busi Raju</td>
</tr>
<tr>
<td>31</td>
<td>SK. Alisha</td>
</tr>
</tbody>
</table>
| 32. | K.V. Ramana Rao  
Jaibeem Cultural and Welfare Association, Mig-4, Green park, NH-5 Road, near Port Stadium, Visakhapatnam-530013. A.P. India |
| 33. | Bade Kodanda Rao  
8-178, Swarnabhatarhi Nagar, Gitam Collage Post, Visakhapatnam |
| 34. | Smt. Janaki R. Kondapi, IAS  
E.F.S &T Department, Secretariat, Hyderabad-500022 |
| 35. | John P Rayan  
Jananayaka Ammaippu Sara thozhilalargal Thozhir Sangam |
| 36. | D. Narasimha Rao |
| 37. | C. Srinivasan, Secretary  
Tamizhaga Meenava Makkal Poratta Kuzhu, 5/326 Vanigar Street, Near Indian Bank, Kovalam 603112, Kanchipuram District |
| 38. | Prof. Fatima Babu,  
Tuticore |
| 39. | Paulduai Perumal, President  
Beach Mineral Producers Association, Mahadevankulam (Post)  
Tirunelveli Dist., Pin -627657 Tamil Nadu. |
| 40. | Solanki Uday Popatlal  
Room No. 5-A, Siddharth Nagar Baroi Mundra-Kachh Gujrat-370421 |
| 41. | B.J. Sumra  
Plot No. 728/B-8, Deepak Chok, Near bordi Gate, Dr. Ambedkar Road, Bavnagar(Gujrat) 364005 |
| 42. | Devendra Singh, Chowdhary  
5-Subhash Colony, Agra-10 U.P. |
| 43. | Joint Secretary  
Assagao Civic and Consumer Forum, House No. 568, Alto badem,  
Assagao (Via Anjuna P.O.), Bardez Goa 403509 |
| 44. | Chandrakant V. Keni, Chairman  
Mahikavati Mahim Fishermen's Sarvodaya Co-Op. Sty. Ltd., Mahim Kajve Road, Mumbai |
| 45. | Amit Kumar Das, General Secretary  
P.K. College Students Union, Purba Medinipur-721401. |
| 46. | Santanu Chacraverti, Secretary  
Society for Direct Initiative for Social and Health Action (DISHA),  
20/4, Sil Lane, Kolkata-700015, |
| 47. | Chairman  
| 48. | Mrs. Wilma D'Costa, Joint Secretary  
Davorlim Civic and Consumer Forum, 14B, The Homestead, Near Federation Colony, Ravanfond, Davorlim, Goa 403707 |
| 49. | Maria Vales, Convenor  
Raia Civic and Consumer Forum, SF3, Snowline Apts. I, Quevona, Raia, Salcete, Goa 403720 |
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
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<tr>
<td>50.</td>
<td>Valentine Coelho, Convenor</td>
</tr>
<tr>
<td></td>
<td>Socorro Civic and Consumer forum, H. No. 1095/1, Zosvaddo-Socorro, P.O. Porvorim, 403501</td>
</tr>
<tr>
<td>51.</td>
<td>Chairman</td>
</tr>
<tr>
<td></td>
<td>Uttan Machichimar &amp; Vahatuk Sahakari Society Ltd., At &amp; Post Uttan Pali, Tal. &amp; Dist. Thane Pin 401106</td>
</tr>
<tr>
<td>52.</td>
<td>Chairman</td>
</tr>
<tr>
<td></td>
<td>Edwan Machhimar Vividh Karyakari Sahakari Society Ltd., At &amp; Post Edwan, Tal. Palghar, Dist. Thane</td>
</tr>
<tr>
<td>53.</td>
<td>Debasis Shyamal, Baguranjalpai Vill. Baguranjalpai, P.O.-Deshdattabar, P.S. -Contai, Dist.-Midnapur (E)</td>
</tr>
<tr>
<td>54.</td>
<td>Joseph. P.</td>
</tr>
<tr>
<td></td>
<td>Ajila Cottage Marianad Puthikurichy P.O., Thiruvananthapuram Kerala, Pin 695303</td>
</tr>
<tr>
<td>55.</td>
<td>Rambhau Patil, President</td>
</tr>
<tr>
<td></td>
<td>Maharashtra Machhimar Kruti Samitee, Machhimar Kruti Bhavan , Opp Bhadvar Park Caff-parade Colaba Mumbai-400005</td>
</tr>
<tr>
<td>56.</td>
<td>Ashok Vasudev Naik, Chairman</td>
</tr>
<tr>
<td></td>
<td>Thane Jila Machhimar Madhayavarti Sahkari Sangh Maryadit, 9, New Scale Shade Building, Mahatama Jyotiba Phule Market , Mumbai 400001</td>
</tr>
<tr>
<td>57.</td>
<td>Chairman</td>
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<tr>
<td></td>
<td>Machhimar Sarvodaya Sahakari Society Ltd., Colaba, Capt. Prakash Pethe Marg, Caff-parade, Colaba, Mumbai-400005</td>
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<td>58.</td>
<td>Chairman</td>
</tr>
<tr>
<td></td>
<td>Arnala Machhimar Vividha Karyakari Sahakari Sanstha Maryadit Arnala, Dist Thana, St. Virar, W. Rly, Pin- 401302</td>
</tr>
<tr>
<td>59.</td>
<td>Birendra Bath Shyamal, President</td>
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<tr>
<td></td>
<td>Baguran Jalpai No. 1 Matsya Khoti, P.O. Deshdattvar, West Medinipur, West Bengal, Pin 721450</td>
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<tr>
<td>60.</td>
<td>Alvaro Bragnaza, Convenor</td>
</tr>
<tr>
<td></td>
<td>Majorda Utorda Calata Residents and Consumer Forum, H. No. 335, Costa Vaddo, Majorda, Salcete-Goa</td>
</tr>
<tr>
<td>61.</td>
<td>Ramona Almeida, Convenor</td>
</tr>
<tr>
<td></td>
<td>Velim Civic and consumer Forum, H. No. 582, Gorkomorod, P.O. Velim, Salcette, Goa 403723</td>
</tr>
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<td>62.</td>
<td>Chairman</td>
</tr>
<tr>
<td></td>
<td>Dhakti Dahanu Machhimar Vividh, Karyakari Sahkari Society Ltd. Distt. Thane</td>
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<td>63.</td>
<td>Chairman</td>
</tr>
<tr>
<td></td>
<td>Kelve Machhimar Vividh karyakari Sahakari Society Maryadit, Post kelve, Tal Palghar, Dist Thane-401401</td>
</tr>
<tr>
<td>64.</td>
<td>Ardeshana Vijay R.</td>
</tr>
<tr>
<td></td>
<td>Gitanjali, At. Upleta Distt. Rajkot Pin 360490 (Gujrat State)</td>
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<td>Name</td>
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<tr>
<td>65</td>
<td>Dr. D. Sudarsanam</td>
</tr>
<tr>
<td>66</td>
<td>Lincoln S. Bastin, Founder</td>
</tr>
<tr>
<td>67</td>
<td>J. Kosumani, President</td>
</tr>
<tr>
<td>68</td>
<td>V. Dinakaran, General Secretary</td>
</tr>
<tr>
<td>69</td>
<td>Aarthi Sridhar</td>
</tr>
</tbody>
</table>
## ANNEXURE-III

LIST OF REPRESENTATIVES FROM THE VARIOUS MINISTRIES/DEPARTMENT AND EXPERTS WHO APPEARED BEFORE THE COMMITTEE FOR ORAL EVIDENCE.

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Date of Meeting</th>
<th>Witness</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Ministry of Environment &amp; Forests</strong></td>
</tr>
</tbody>
</table>
| 1.      | 11.11.2008      | 1. Shri Vijai Sharma, Secretary  
 |         |                 | 2. Shri J. M. Mauskar, Additional Secretary  
 |         |                 | 3. Shri M.B. Lal Additional Director General (FC)  
 |         |                 | 4. Shri Ansar Ahmad, Inspector General Forests (FC)  
 |         |                 | 5. Dr. Nalini Bhat, Advisor  
 |         |                 | 6. Dr. A. Senthil Vel, Additional Director |

**Ministry of Earth Sciences**

| 3.      | 30.12.2008      | 1. Dr. Shaileshe Nayak, Secretary  
 |         |                 | 2. Smt. Villasini Ramachandran, AS & FA  
 |         |                 | 3. Shri D.P. Singh, Joint Secretary  
 |         |                 | 4. Dr. K. Somasundar, Scientist 'E'  
 |         |                 | 5. Shri P. Madeswaran, Scientist ‘E’  
 |         |                 | 6. Dr. S.K. Das, Scientist 'G' |

**Centre for Environment Education (CEE), Ahmedabad**

| 4.      | 13.01.2009      | 1. Dr. Shailaja Ravindranath, Regional Director |

**Survey of India, Dehradun**

 |         |                 | 2. Shri S. V. Singh, Deputy Director  
 |         |                 | 3. Shri D.K. Kar, Suptdg. Surveyor |

**Space Applications Centre, Ahmedabad**

| 6.      | 10.02.2009      | 1. Dr. Ajai, Group Director  
 |         |                 | 2. Shri Santanu Bhatawdker, Officer on Special Duty  
 |         |                 | 3. Dr. Rajawat, A.S., Scientist |
ANNEXURE-IV

List of State/Union Territory Governments who sent their comments/views on the Coastal Management Programmes

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of States/Union Territories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kerala</td>
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<td>2.</td>
<td>Gujarat</td>
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<td>3.</td>
<td>Tamil Nadu</td>
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<td>4.</td>
<td>Maharashtra</td>
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<td>5.</td>
<td>Orissa</td>
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<td>6.</td>
<td>Andhra Pradesh</td>
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<tr>
<td>7.</td>
<td>Andaman and Nicobar Islands</td>
</tr>
<tr>
<td>8.</td>
<td>Daman &amp; Diu and Dadra &amp; Nagar Haveli</td>
</tr>
<tr>
<td>9.</td>
<td>Puducherry</td>
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