# F.No.J-170011/18/96-IA.III Government of India Ministry of Environment and Forests (IA-III Division)

Room No: 1032, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi – 110 003.

Dated: 16th November 2012

To All Members of NCZMA

Subject: Convening of the 26th Meeting of the National Coastal

Zone Management Authority - Reg.

It is informed that the 26<sup>th</sup> meeting of the National Coastal Zone Management Authority is Scheduled to be held on **27<sup>th</sup> November**, **2012** 11.30 AM, Room No. 40**2**, Conference Hall, 4<sup>th</sup> Floor, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi. Agenda for the meeting will follow:

2. You are requested to kindly make it convenient to attend the meeting.

Yours faithfully,

(E. Thirunavukkarasu)

Deputy Director
Telefax: 2436 0806

#### Copy for information:

1. PS to Secretary (E& F)

2. PS to Joint Secretary (AT)

# Agenda for 26<sup>th</sup> meeting of National Coastal Zone management Authority (NCZMA)

Agenda item No. 1. Confirmation of the Minutes of the previous Meeting held on 16.07.2012

Agenda item No. 2. Action taken on the Minutes of the previous Meeting.

Agenda item No. 3. Consideration of matters related to court /cases directions/ appeals.

- 1. Consideration of appeal by M/s Quilon Education Trust as per the order of Hon'ble High Court, Kerala in WP 22652 of 2011.
- 2. Matter related with order of High Court of Bombay in Writ Petition No. 953/ 2012 filed by Shri Sai Sagar Consultant, Vs UOI in the Bombay High Court.
- Agenda item No. 4 Consideration of proposals/issues on CRZ, from various State Coastal Zone Management Authorities (SCZMAs)
  - 1. Reclassification of CRZ areas on ground of 'error evident on record' recommended by MCZMA
  - 2. Consideration of proposals on authorization of Institutes /agencies for demarcation of HTL/LTL.

Agenda item No. 5 Any other items with the permission of the Chairman.

Agenda item No. 3. Consideration of matters related to court /cases directions/appeals.

## 3.1 Consideration of appeal by M/s Quilon Education Trust as per the order of Hon'ble High Court, Kerala in WP 22652 of 2011.

The matter relates to construction of an engineering college at Adichannlor Village of Kollam District, Kerala in violation to the Coastal Regulation Zone Notification, 1991. The matter was dealt by the Kerala Coastal Zone Management Authority (KSCZMA) who had issued Direction on 25.03.2011 to stop the construction. M/s Quilon Education Trust has challenged the order of KCZMA before the Hon'ble High Court of Kerala.

Hon'ble Court directed the petitioner to approach the Ministry and the Ministry to place the matter before the NCZMA and pass an order after hearing all the concerned.

Accordingly, the Petitioner filed appeal before NCZMA Shri Mohamed. Nowfal, Chairman, Quilon Education Trust (QET), and P.B. Sahasranaman, Advocate, attended the meeting. After deliberation, report from KCZMA was sought.

### 3.2. Matter related with order of High Court of Bombay in Writ Petition No. 953/2012 filed by Shri Sai Sagar Consultant, Vs UOI in the Bombay High Court

This relates to deletion of plot bearing CTS No. 195 (pt) of village Andheri, Mumbai from the purview of CRZ. The issue of deletion of plot was recommended by Maharashtra Coastal Zone Management Authority and discussed in the NCZMA Meeting held on 15.9.2009. Authority decided that since demarcation by both authorized agencies viz. NIO and CESS apparently confirms that the plot falls beyond 500 mts from HTL, MCZMA may consider the above HTL demarcation for the entire area in light of other relevant maps and documents and if so concluded proposal to delete the plot from the purview of CRZ and send a comprehensive plan and proposal for the area to NCZMA. MCZMA submitted a proposal for the above plot alone which was considered by the NCZMA in its meetings held on 19.4.2011 and 30.5.2011. The authority felt that as the new CRZ Notification, 2011 has been issued by MoEF on 6.1.2011, it would be desirable to consider such cases in light of the new Notification and there is a danger of regularization of violations through such reclassifications. Also decided to freeze the Coastal Zone Management Plans as approved in 1996 and the pending reclassification proposals should be returned to respective SCZMAs with a suggestion that while preparing the CZMPs under new CRZ Notification, 2011, concern issues could be addressed. It was also decided that it might be necessary to consider cases where there is error apparent on record. Accordingly, all the pending proposals including the above were returned to the respective State Coastal Zone Management Authorities. OM on this was issued on 1<sup>st</sup> July, 2011. Further an office order on procedures to be followed in reclassification on the grounds of "Error apparent on the face of the Record" was issued on 8<sup>th</sup> August, 2011.

In WP 953 of 2012 filed by Ms/ Sri Sai Sagar Consultant, the Hon'ble High Court of Bombay on 27.04.2012 directed that the matter shall be considered by NCZMA within 3 months from the receipt of recommendation from MCZMA. MCZMA has sent its recommendation around end of May, 2012. It was noted that additional information as per

the OM dated 08.08.2011 were missing in the recommendation of MCZMA, hence it was sought. MCZMA vide letter dated 17.10.2012 (Annexure I) provided the reply.

Agenda item No. 4 Consideration of proposals/issues on CRZ, from various State Coastal Zone Management Authorities (SCZMAs)

- 4.1 Reclassification of CRZ areas on ground of 'error evident on record' recommended by MCZMA (Annexure II)
- 4.2 Consideration of proposals on authorization of Institutes /agencies for demarcation of HTL/LTL.

Ministry had authorized seven Agencies viz.

- 1. Space Application Centre, Ahemedabad,
- 2. Centre for Earth Science studies, Thiruvanthapuram,
- 3. Institute for Remote Sensing Anna University, Chennai,
- 4. Institute of Wetland management and Ecological designs, Kolkatta
- 5. Naval Hydrographer's Officer, Dehradun,
- 6. National Institute of Oceanography, Panjim, Goa
- 7. National Institute of Ocean Technology, Chennai.

#### There are proposals from

- (i) Odisha Space application Centre, Bbubaneswar (Annexure III)
- (ii) Science and Technology Park, Department of Science and Technology, University of Pune (Annexure IV).

The request from the above agencies may be considered which may reduce the burden on the seven agencies and also the time requirement for HTL/LTL demarcation etc.

#### **GOVERNMENT OF MAHARASHTRA**

Tel.: 022-22873845 Fax.:022-22813947 No. MCZMA 2008/334/CR-7/TC-3 Environment Department, Room No. 217 (Annex), 2<sup>nd</sup> Floor, Mantralaya, Mumbai – 400 032. Date: 17<sup>th</sup> October. 2012.

То

The Director,
Coastal Regulation Zone,
Ministry of Environment & Forests,
Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi – 110 003.

Sub: Information sought regarding details in W.P. No.647/2012 filed by Rustomjee Realty Private Ltd. V s UOI – Mumbai High Court.

Dear Sir,

With reference to your letter dated 39.8.2012 by which information has been requested from the MCZMA, the details are submitted for necessary action. The matter has been pending in the Mumbai High Court wherein orders were issued to expedite the decision. Accordingly, the MCZMA met in April 2012 and has forwarded the recommendations on 16.6.2012 to the MoEF. All necessary details have already been provided by the same letter.

been submitted to you vide letter dated 18.2.2010. The same was reconfirmed as "the error evident on record" as per the Office Memorandum of MoEF dated 8.8.2011". The findings by the National Institute of Oceanography (NIO), Goa, prove that an error had occurred due to demarcation of CRZ set back line from the HTL as per the guidelines of MoEF. The demarcation was done as if the tidal body was Sea and not Creek, hence the CRZ area was measured as 500 mtrs. Whereas when the tidal body is a Creek, the distance of 500 mtrs., does not apply. The distance would be 150 mtrs., as per the existing CRZ Notification. However, while

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#### MAHARASHTRA COASTAL ZONE MANAGEMENT AUTHORITY

Tel. No.: 2285 5082

e-mail : mahamezma@gmail.com

No MCZMA 2011/ CR 33 / TC 3

Office of the -

Maharashtra Coastal Zone Management Audio ( ... Environment Department, Room No. 217(Augus)

Mantrelaya, Mumbai- 400 032

Date: 12-9-2012

Te The Director, Coastal Regulation Zone, Ministry of Environment and Forest, Arryayaran Bhavan, CGO complex, Ledhi Road, New Delhi.

#### Subject:

Reclassification of CRZ areas on ground of "error evident on record,-

- (a) Land bearing S. No. 2 to 53 and others in Villag Ranjnoti, Taivis: Bhiwandi and Land reserved for Bhiwandi Textile Park.
- (b) Plot bearing Survey No. 275 (pt) & CTS No. 657A & 1295 of Village Kanjur, Taluka Muland, Dist. Mumbai Suburban
- (e) Plot bearing CTS No. 657-D & 657-C of Village Kanjur, 'S' Ward Kanjur Marg (East), Mumbai
- (d) Plot bearing Nos. D/23. D/23A, D/24. D/25,D/30, D/31, D/45, E/32. D/45, D/46, D/47 and D/48 of CTS No. 1A(pt) and also bearing survey No. 167 (pt) of Village Pained Goregaon at Goregaon (West) Mumbal.
- (e) villages namely Salav, Nide, Mithekhar, Chehar, Waghulwadi, Fmil Yesda and Shirgaon along Kundatika River near Revdanda, Rsigad.

Reference:

MoEF's Office Memorandum dated 01.07.2011 & 08.08.2011 regard to reclassification of URZ areas

Bir,

The MCZMA in its 71st meeting held on 26th August, 2011, discussed the Office Edemorandum (OM) dated 01.07.2011 & 08.08.2011 issued by the Ministry of Environment and Forest, New Delhi regarding reclassification of CRZ areas of CZMP approved in 1996 under the CRZ Notification, 1991. Based on the said OM, MoEF returned the proposals of reclassification back to MCZMA. As per this OM, only those reclassification proposals which involve "Entropedient on record" will be considered by MoEF, after recommendations from respective CZMA. Authority in the said meeting decided that State CZMAs shall recommend a proposal for reclassification under CRZ Notification, 1991, on the ground of "error evident on record" to the MCZMA for consideration, only after following the procedure as stipulated in MoEF's Office. Memorandum dated 8.8.2011.

2. Accordingly, the field verification/visits were carried out on 8th and 9th November 2011 to sites mentioned in subject matter.

The observations / conclusion of the site visit report submitted by IRS, Chennai is as follows-

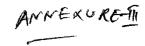
(a) Land bearing S. No. 2 to 33 and others in Villag Ranjuoli, Taluka Bhiwazdi Ard Land reserved for Bhiwazdi Textile Park.

- Agenda and Minutes of 50<sup>th</sup> and 51<sup>st</sup> meeting of MCZMA held on 25.3.2009 and 24.4.2009 and respectively.
- Minutes of 18th meeting of NCZMA held on 15th Sep. 2009.
- 3. Resurvey report of NIO, Goa
- 4. Site visit report of IRS, Chemai
- 5. MoEF letter dated 26.9.2011 returning the proposal back to MCZMA
- 6. Minutes of 74th and 76th meeting of MCZMA held on 23.4.2011 and 30.7.2012.
- e) Villages namely Salav, Nide, Mithekhar, Chehar, Waghulwadi, Emil, Yesde and Shirgaon along Kundalika River near Revdanda, Raigad.
  - 1. Agenda and Minutes of 65th MCZMA meeting held on 9.9.2010
  - 2. Resurvey report of NIO, Goa
  - 3. Site visit report of IRS, Chennai.
  - 4. Minutes of 74th and 76th meeting of MCZMA held on 23.4.2011 and 30.7.2012.

#### Copy to:

- Chasrperson, Maharashtra Coastal Zone Management Authority, Mantralaya, Mumbai-400 032
- 2. Director, Coastal Regulation Zone, Ministry of Environment & Forests, Paryawaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110 003
- 3. Director, Western Zone (Bhopal), Kendriya Paryayaran Bhavan, Link Road No. 3, Bhopal-462 016
- 4. M/s Eco Homes and Yogi Realty Ltd., 271, 7th floor, Building No. 2, Solitaire Corporate Park, Andheri Kurla Road, Chakala, Andheri (E), Mumbai.
- 5. M/s Metro infrastructure & project solutions India Pvt Ltd, 1, Mayfair Meridian, Near St. Blaize Church, Caesar Road, Andheri (W), Mumbai.
- 6. M/s. Particle Boards India Limited, 35, Maker Chambers-III, Nariman Point, Mumbai-400 021
- 7. M/s Makwana properties, project consultant Alpha Environs 208, P.N. Kothri Estate, acat Asian paints, LBS Marg, Bhandup (W), Mumbai.
- 8. M/s Welspun Maxsteel Ltd, village Salay, Tal- Murud, Dist Raigad.
- 9. Select File (TC-3)

19-16/2012 -SICOM





### **ODISHA SPACE APPLICATIONS CENTRE (ORSAC)**

Department of Science & Technology, Government of Odisha

No.1960 CY Date: 19-110/12

A. K. Mohapatra, IFS Chief Executive

To

The Joint Secretary, Ministry of Environment and Forests Government of India, Paryavaran Bhawan, CGO Complex Lodhi Road, New Delhi-110 003

(Kind Attention: Sri Rajiv Gauba, IAS)

Authorisation to Odisha Space Applications Centre, Bhubaneswar for demarcation of HTL and LTL in the Coastal Regulation Zone

Sir,

Odisha Space Applications Centre (ORSAC) is a premier institution in the field of geospatial technology application working under the Dept. of Science & Technology, Govt. of Odisha. The Centre is accredited by various Central/State Govt, organizations for its outstanding contribution in the frontiers of research and development activities using space technology/GPS and Geographic Information System (GIS). The Centre has commendable record in generating spatial data on land and water resources from reconnaissance to cadastral level. A number of projects related to coastal zone have been successfully completed to the best satisfaction of the sponsoring agencies ( A list of completed projects is placed at Annexure-1).

The centre was earlier designated as a Marine Data Centre by the Dept. of Ocean Development, Govt. of India .Mapping activities were undertaken on various scales and database have been created on coastal landforms/ land use, wetlands, hydrogeomorphology, soil etc. Mapping of land use/land cover in CRZ on 1:25,000 scale was also undertaken by this centre in association with Space Applications Centre (ISRO), Dept. of Space, Govt. of India, Ahmedabad. Based on these maps Costal Zone Management Plan Maps were prepared for the State Forest and Environment Department of Government of Odisha.

The centre has also gained experience in preparing cadastral scale (1:5 000 scale) land use maps using high resolution satellite data. A pilot study was undertaken in Paradeep Port Area under the guidance of Space Applications Centre (ISRO) Ahmedabad under Coastal Zone Studies Project. Survey Plot level landuse details are depicted and the information content is useful in preparing management plans for the area. With Facilities like DGPS, 3D-Analysis Software and advanced Geographic Information System (GIS) available in the centre, the survey team at ORSAC is capable enough to undertake large scale mapping.

The centre houses a good computer laboratory comprising state of art hardware and software on digital image processing, Geographic Information System (GIS) and Data management. The centre is equipped with modern survey and ground truth equipments like GPS, DGPS and Total Station.

Contd...P/2

In the field of satellite communication the centre is also recognized as a nodal agency in furthering the space based communication objectives of Dept. of Space. Under GRAMSAT Project, ORSAC facilitates VSAT network at State Capital, District, Blocks and Grampanchayat level. There are DRS network for conducting Interactive training Programme, Evening Transmission on various development programme and teleconferencing facilities. The EDUSAT programme also equally aims at providing transmission facilities to remote schools on educational topics covered by renowned teachers/academicians of the state.

The centre has 25 trained and experienced scientists from multidisciplinary subjects like oceanography, geology, geography, biology, environmental science, statistics, computer science etc. and 20 personnel from Engineering/Technical background who have adequate qualifications and experience in mapping/surveying and database management.

The scientists of this centre are regularly in touch with the scientists/officials of the state Dept. of Forest and Environment, Revenue Dept. and other organizations in dealing with various coastal related problems and provide suggestions as and when required.

Presently, there is a requirement to map the coast on 1:25,000 scale and on cadastral (1:4,000) scale as per the recent MOEF Notification dated 6<sup>th</sup> January 2011. To meet the requirements, ORSAC is ready to extend its support in mapping the coastal zone of Odisha.

ORSAC is capable of doing independent survey in the CRZ and therefore may be enlisted as an authorized agency for demarcation of HTL and LTL and land use survey in the CRZ.

As directed by the Director, NCSCM, Chennai the proposal is submitted to you for your kind information and subsequent placement in the meeting of the National Coastal Zone Management Authority.

I, therefore request you to take appropriate action for recognition of ORSAC as a mapping agency for the above purpose.

Yours faithfully,

CHIEF EXECUTIVE

- Copy to: 1 Director, National Centre for Sustainable Coastal Management, (NCSCM), Anna University, Sardar Patel Road, Chennai-600 025 with a request to recommend the case of ORSAC to MOEF
  - 2. Director, Society of Integrated Coastal Management (SICOM) 9,Institutional Area,Lodhi Road, New Delhi-110 003 for information and necessary action
  - 3. Director, Environment-cum-Special Secretary, Forest and Environment Department, Govt. of Odisha for kind information and necessary action. He is requested to take up the matter with MOEF.

#### LIST OF COASTAL/OCEAN RELATED PROJECTS

- 1. Coastal zone Mapping 1988-1997 (including Chilika Lagoon) under MARSIS Programme of DOD.
- Database creation on mangroves of Orissa DOD-1993.
- 3. Environmental Monitoring of Mahanadi and Devi Estuaries, DOD. 1998-1991.
- 4. Beach Profile Survey, DOD. 1988-90

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- 5. Chilika Environmental Monitoring 1987-96
- 6. Mapping of coastal wetland and shoreline change along Orissa and West Bengal coasts using satellite data, SAC, 1991.
- 7. Nationwide Landuse/landcover mapping of Orissa using IRS Data, NRSA 1991.
- 8. Coastal Environment, SAC, 1992
- 9. Environmental status survey of World Bank Assisted Shrimp culture Project sites, World Bank/Fishery Dept. 1993
- 10. Mapping of Special tourism Area in sea beach between Puri and Konark 1994.
- 11. Coastal Zone Management plan for Orissa (Chilika mouth to Konark Stretch), Dept. of Forest & Environment 1995,
- 12. Coastal Zone Management Plan for Orissa (Konark to Paradeep), Dept. of Forest and Environment, 1995
- 13. Coastal Zone Management Plan for Orissa (Bahuda-Chilika mouth) Dept. of Forest and Environment, 1996.
- 14. Coastal Zone Manasgement Plan for Orissa (Paradeep t9 Balasore), Dept. of Forest & Environment, 1996
- 15. Wetlands of Orissa, SAC, 1996.
- 16. Coastal Regulation Zone (CRZ) Mapping, Orissa, SAC, 1996.
- 17. Notified Wetland Chilika, SAC, 1997.
- 18. Marine Remote Sensing Information System (MARSIS) ORSAC/NRSA/SAG, 1997.
- 19. Validation of Satellite Derived Potential Fishery Zone (PFZ), NRSA, 1997.
- 20. Remote Sensing Based study on Landuse/land cover of proposed Paradeep Industria Park, IDCO, 1998.
- 21. Mapping of coastal wetland and shoreline changes along Orissa Coast, SAC, 1998.
- Coastal Zone Information System (CZIS) Pilot Project on Mahanadi Estuarine Mangrove area, SAC, 1998.
- 23. Integrated Mission for Sustainable Development (IMSD) Ganjam Districts NRSA 1998-2002.
- 24. Flood Mapping 2000-2001.
- 25. IRS P4 (OCEANSAT-1) Ocean Color Monitor Utilisation Coastal Processes alone Orissa coast, SAC, 2003.
- 26. Preparation of CRZ maps on scale 1:10,000, (Parts of Orissa) Dept. of Fishery, 2002 2003
- 27. Characterization of Olive Ridley sea turtles along the Orissa coast 2003
- 28. Ground water exploitation/sitting maps under Operation Trishna Project of Govt. c Orissa.
- 29. Studies on Spatial pattern and Landscaoe structure of major wetland of Orissa usin High Resolution Remote Sensing Data, MOEF, Govt. of India 2000-2003.
- 30. ISRO-GBP-RS Application to study impact on coastal zone around the Chilika Lake SAC (ISRO) 2003
- 31. Disaster Management System database for 10 coastal districts.
- National Wetland Inventory and Assessment 2008-10, MOEF.



# **SCIENCE AND TECHNOLOGY PARK**

A STEP promoted by NSTEDB

Department of Science and Technology, Government of India and University of Pune

Dr. Rajendra Jagdale

Director General & CEO

STP/MoEF/343

7<sup>th</sup> August, 2012

To,
Shri. Lalit Kapoor
Scientist F,
Director,
Ministry of Environment & Forests,
Government of India,
Paryavaran Bhavan, CGO Complex, Lodhi Road,
New Deihi - 110 003

<u>Subject: Eco - Housing Certification to be considered for out of turn consideration for environmental clearance in respect of Building and Construction Sector Projects</u>

Reference: Office Memorandum No.19-58/2011 IA.III Dated 10.5.2011 issued by Ministry of Environment and Forest, Government of India

Dear Sir.

Let me take this opportunity to introduce our organization - Science and Technology Park,

The Science and Technology Park,

The Science and Technology Park (Scitech Park) is one of the Science and Technology Entrepreneurs Parks (STEPs) set up in the year 1988, jointly by National Science and Technology Entrepreneurship Development Board (NSTEDB) of Department of Science and Technology, Government of India, and University of Pune. Scitech Park plays a significant role in knowledge & resource management and mainly focuses on commercializing resources, managing innovations, intellectual property, promotion and commercialization of glean technologies, industry sponsored research, entrepreneurship development, contract research, building synergy between industries and academia etc.

We draw your particular attention to one of our key thrust areas the "Eco – housing Certification Programme" for residential buildings. This is the first ever indigenous criteria developed by Science and Technology Park in India and world which extensively addresses the residential sector. On a pilot scale we started implementing this since 2005 along with Pune Municipal Corporation. Pune Municipal Corporation, the first urban local body in India to adopt and promote eco – housing certification programme, has appointed Scitech Park as the Evaluating and Monitoring Agency for eco – housing certification of the residential

buildings within corporation limits since 2008. Today we have 63 projects under "Ecohousing Certification Programme "of which 38 have already been awarded Provisional Ecohousing Certificates and 6 projects have been awarded Final Certification with amazing achievements in terms of energy saving, water saving, waste management, reduction in carbon footprint etc. We also have ongoing projects in Aurangabad, Mumbai, West Bengal and Rajkot and Karnataka would follow soon. Pune Municipal Corporation, the first urban local body in India to adopt and promote eco — housing certification programme, has appointed Scitech Park as the *Evaluating and Monitoring Agency* for eco — housing certification of the residential buildings within corporation limits since 2008. Scitech Park had also developed retrofit criteria for Municipal Corporation of Greater Mumbai (MCGM).

So far we have received excellent response from the builders/developers of Pune so far (eg. Nyati Developers, Kumar Builders, Vascon Engineers, Darode Jog Developers, Rohan Builders, Pride Housing, City Corporation Limited, Kolte Patil Developers, Goel Ganga Builders, Kool Homes Developers, K. Raheja Corp, Suyog Developers, Marvel Developers, Gera Developers, Pethkar Constructions, Reacon Engineers, Ahura Builders etc.We have attached our achievements so far in Pune due to incorporation of Eco – housing Certification for residential buildings (Please refer to Attachment1).

Sir, we would request you to kindly go through our **brochure** and **eco – housing criteria list** and **consider Eco – housing Certification** as one of the rating systems to be adopted by developers for their proposals for obtaining environmental clearance in respect of Building and Construction Projects to ensure priority for consideration, out of turn, by the Expert Appraisal Committee/State Level Expert Appraisal Committee.

Thanking You, Yours-sincerely,

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Rajendra Jagdale, PhD

Director General & CEO

Encl: 1. Eco Housing Criteria Version 1.0 and II

2. Scitech Park Brochure

3. Eco - Housing Brochure

For any further details kindly visit us at www.ecohousing.in/www.scitechpark.org.in

### Attachment 1: Achievements of Eco – housing Certification Programme in Pune

#### Following are the brief highlights of the eco – housing projects so far:

- Number of projects applied for certification: 63
- Number of projects awarded provisional certificate: 38
- Projects in process: 19

- Number of projects in final stage of completion: 6
- Total area certified: 15.05 lakh sq.m (Approx)

As per the calculation received from various developers who have implemented the eco – housing criteria in their projects we have compiled certain important achievements:

- Achieved saving of 60-65% electricity In 15.05 lakh sq.m built up certified the conventional energy consumption has been reduced with an outstanding energy saving of approximately 80,000 units.
- Incorporation of environmental architecture ensuring minimum artificial lighting, cooling, heating etc.
- Achieved saving of 50-55% water Water saving amounting to approximately 90,00,000 litres/day
- Estimated carbon footprint reduction per year would be about 80,000 tons.
- Additional benefit of complete waste water treatment, reuse and management. Total sewage and organic waste treatment on site reducing the burden on the municipal corporation.
- Biodiversity conservation through retention of existing trees on site and native tree
  plantation, theme parks, restriction in site selection etc.
- Rainwater harvesting and storm water collection and recharge
- Solar water heating
- Renewable energy based outdoor and indoor lighting

### WCZMA

<ol> <li>Secretary         Ministry of Environment and Forests,         New Delhi.</li> </ol>	- Chairman
<ol> <li>Director,         National Institute of Oceanography,         Goa.     </li> </ol>	- Member
3. Chief Town Planner, Town and Country Planning Department, Government of Goa.	- Member
<ol> <li>Member or an Officer of an equivalent rank Central Groundwater Board, New Delhi.</li> </ol>	- Member
<ol> <li>Joint Secretary (Tourism), or his representative Ministry of Tourism, New Delhi.</li> </ol>	- Member
6. Director General (Fisheries) Ministry of Agriculture, New Delhi.	- Member
7. Dr. Ramchandran Ramesh, Institute of Ocean Management, Anna University, Chennai.	- Member
8. A representative from Space Application Centre Ahmedabad.:	- Member
9. Shri R. Surendira Prasad, 19, Khader Nawaz Khan Road, Third Floor, Brindavan Apartments Chennai - 600 0034	- Member
10. Shri K.M Rajan, Kottayarukil, Kosady, Madukka Post, Mundakayam, Kottayam, Kerala -686513.	- Member
11. Shri Kaushal Kishoi"e, 920, Ninth Floor, "A" Wing, Corporate Avenue, Sonawala Road, Goregaon (E), Mumbai -400 063.	- Member
12. Joint Secretary or Adviser, In-r.hArge of Coastal Zone Management. Secretary	- Member