

**Minutes of the Special Meeting of KCZMA held on 27.11.2024 (Wednesday) through online mode regarding the construction of Protection work along Thanthonnithuruth Island, Construction of Outer Bund road and formation of road**

The meeting started at 10.00 A.M and Dr. Rathan U. Kelkar IAS, Secretary, Environment Department, Government of Kerala, and the Chairman, Kerala Coastal Zone Management chaired the meeting.

**Participants**

1. Sri. Suneel Pamidi, IFS, Member Secretary, KCZMA
2. Dr. C. Revichandran, Member (Expert), KCZMA
3. Dr. K. K. Vijayan, Member (Expert), KCZMA
4. Dr. Richard Scaria, Member (Expert), KCZMA
5. Smt. Amrutha Satheesan, Member (Legal), KCZMA

**In attendance**

1. Sri. N S K Umesh IAS, District Collector, Ernakulam
2. Sri. Reghuraman, Secretary, GIDA
3. Sri. Abbas, Executive Engineer, Irrigation Department
4. Sri. P. C. Sabu, Joint Secretary, KCZMA
5. Sri. P. Kalaiarasan, Environmental Engineer, DoECC

The meeting commenced at 10.00 am. The Member Secretary, KCZMA welcomed all participants to the meeting. The Secretary, GIDA gave a brief description regarding the project and the Sri. N S K Umesh IAS, District Collector, Ernakulam appraised the problems of the inhabitants of the island and the need for implementing the project.

The Secretary, GIDA was invited by the Member Secretary for a presentation with replies to the queries raised by KCZMA and the queries were discussed in detail. The reply to the queries is as follows:

- 1) *The perceived benefits of prevention of entry of water into the houses of the residents on the Islands are doubtful as such a conclusion was drawn not relying upon sound data or modeling. Also, it may be a more prudent and economical approach to focus on elevated house design adopted in low-lying areas.***

The construction of elevated houses in Thanthonnithuruth is very costly and neither the Cochin Corporation nor GIDA is willing to invest in such an expensive project.

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**2) Tidal flood modeling study**

The tidal values from Willington Island are being considered and the proposed level of proposed bund is fixed as +1.793MSL.

**3) Total quantity of material to be dredged and the locations identified for dredging.**

It is proposed a total quantity of 29160 cubic meters of Silt can be dredged from both the eastern and western sides of the Island near the proposed project area.

**4) Present Bathymetry of the surrounding area**

The maximum filling depth is around 2.6m.

**5) Mangrove afforestation plan**

The Secretary has assured that the mangrove afforestation plan for an area of 2587.04m<sup>2</sup> has been incorporated into the project.

The Authority members have opined that the issues faced by the island's inhabitants due to water entry should be addressed. However, while approving projects of this nature, the past experiences of the State should be borne in mind, and decisions should be based on sound scientific principles with due consideration to ecology, environment, and problems faced by the people. After a detailed discussion of the replies, the authority has observed that they are unsatisfactory and has requested that the project proponent submit a detailed reply based on scientific parameters and data on the following aspects.

- 1) A flood map and inundation map considering the floods of previous years, including those of 2016 and 2018, using simulation models.
- 2) In the project proposal, the CRZ IA is 2267.11 m<sup>2</sup> and CRZ IV B is 4867.52 m<sup>2</sup>. Mangroves are effective bank protection measures, and the need for a 5m wide bund cum road construction by destructing the mangroves may be revisited.

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- 3) Provide the bathymetry of the proposed dredging area and the effects of the dredging on benthic flora and fauna.
- 4) As per IS code 12094 – 2000, the top width of the embankment should be 5m to 5.5m, and it should have turf, a longitudinal drain, and a freeboard of 1.5m to 1.6m with a side slope of 1:2 to 1:3. However, the proposal only chooses a top width of 5m, and other specifications of the IS code are not followed. The pile, slab, and rubble masonry are not part of the IS Code. Therefore, the proposal shall be revisited by the Project Proponent.
- 5) The total area of the Island is 42.85Ha, and the perimeter reported by the Secretary is around 4 kilometers. The proposed bund is only for 600 meters (310m on one side and 290m on the other side of the Island) and will not protect the inundation due to high floods. Therefore, the proposal shall be reviewed by the Project Proponent.
- 6) Since the project proposal falls in CRZ IA and CRZ IVB, the project proponent should apply through PARIVESH, along with the above additional details.

The meeting ended at 11.30 AM with a vote of thanks to the Chair.



Dr. Rathan J Kelkar IAS • Chairman, KCZMA

Suneel Pamidi IFS, Member Secretary, KCZMA