

MINUTES OF THE 55th MEETING OF THE KERALA STATE GEOLOGICAL PROGRAMMING BOARD (SGPB)

Date: 17th September 2018

Venue: Banquet Hall, Government Guest House, Thycaud, Thiruvananthapuram

Time: 10.30 Hrs to 14.30 Hrs

Participants: Separate list appended

Proceedings:

55.1.0 The Member Secretary and Director of Mining and Geology Shri.K.Biju IAS chaired the 55th meeting of the SGPB. In his welcome speech the Chairman highlighted the need for judicious use of ecological resources in the scenario of post-flood reconstruction in the State. He approved the minutes of 54th SGPB meeting and invited the delegates to present the review of work done and generously interact.

55.2.0 Shri. C. Muraleedharan, DDG GSI gave an overview of the geological investigation programs and informed that majority of the landslide susceptible area mapping has been completed. He informed that the strategy regrading demarcation of zones is implemented for reconstruction. Shri. Mathew Joseph, Director GSI presented the work done and proposed programs. Delineation of three zones and site specific studies has been completed under the National Landslide Susceptibility Mapping (NLSM) Program, The Chairman proposed crafting of panchayat wise data for issuing licences or permits in susceptible areas. Also sharing of information with LSGD will robust the prudent monitoring of mining and construction activities. Shri. Joseph Francis, Scientist, stated that KSREC evaluates the issues at micro level and cadastral level information is available.

Action GSI & KSREC

55.3.0 Sri Biju Sebastian, Sr. Geologist, State Mining & Geology raised the issues regarding legal back up while sanctioning construction permits in susceptible areas. Chairman directed that likewise meetings are forums for collection of entire SGPB data and can be submitted to the concerned authority. This can be assigned as a G.O. or dictum to use as evidence based data for decision making.

Action DMG

55.4.0 Shri. A.G. Gopakumar, Superintending Geologist GWD told that provision of data base regarding landslide prone areas will help to avoid such areas for recharge projects. Dr. S.N Kumar Associate Professor, Department of Geology, University of Kerala urged for a pilot study in one or two areas where the recommendations are implemented in landslide prone locations, ie, Kallarkutty dam site.

Action GSI

55.5.0 Shri. Anup Karanth, Senior DRM Specialist, World Bank informed the development of their work regarding earthquake rapid damage assessments. He enquired about the availability of hazard map, details of technical study and the institutions involved. Dr.V.Nandakumar, Scientist-G said that the available landslide susceptibility map and the landslide hazard map with NCESS can be set as a preliminary reference. Further, colossal level of data collection and scientific details are required to model landslide investigation to derive solution.

Action NCESS/GSI

55.5.1 Shri. Arnab Bandyopadhyay, Senior Transport Engineer, World Bank asked about monitoring of vulnerable slopes and the availability of maps with rainfall micro level data super imposed on GIS. Categorisation of forest is needed for further assessment of causes and proneness to landslides. Dr.V. Nandakumar, NCESS replied that Secretary, MoES has instructed to install five monitoring stations in the next one year time throughout the Western Ghats.

Action NCESS

55.6.0 Dr. S.N Kumar, University of Kerala suggested that Specific recommendations to the local bodies based on pilot studies on areas recognised through small scale maps of landslide prone area can reduce the damage. Chairman stated that every Panchayat or local body should have a plan for entire disaster proofing. Shri. Biju Sebastian, State Mining & Geology emphasised framing of hill development authority having a technical team including a geologist for monitoring constructive activities.

Action GSI& DMG

55.7.0 Dr.Saju Varghese, Senior Geologist, M& CSD, GSI presented the details of work done. About 2000 million tonnes of sand deposit is found in 20-30m depth in five sectors of

offshore channels along the west coast and around 15 million tonnes of construction grade sand can be dredged per year. He expressed concern over the small rise of Sea Surface Temperature (SST) in the past decade and regarding the significant pressure-temperature variation along the west coast in the recent past. Along with this stormy events coupled with monsoon led to torrential rains. The recent flood events and destructive landslides in the state were the leftover of this pattern.

55.8.0 Dr. V. Nandakumar also raised concern over environmental issues akin to dynamicity of beaches in the context of offshore mining. He highlighted the 'concept of super quarries' introduced by Dr. K.P. Thriuvikramaji, former HOD of Geology, University of Kerala. In the present context of huge requirement of building materials, the government/Quasi government owned super quarries can incessantly meet the demands.

Action GSI/DMG

Shri. Joy N.R, Chief, Industry, State Planning Board took over the charge of Chairman.

55.9.0 Shri.B.Kunhambu, Regional Director, CGWB, has given a brief description of the programmes during the review period. He opined that the recharge was not proportional to the intensity of rainfall during floods which led to fall in ground water level in the river beds of periyar, pampa and also in Alappuzha.. Chairman proposed that groundwater trends study should be taken up by CGWB along with CWC with the assistance of Revenue department.

Action CGWB

55.10.0 Dr.V.Nandakumar, NCESS gave an overview of the ongoing R&D programs and the proposed research for the period 2018-19.He highlighted the need for Creation of public awareness regarding Disaster Management and terms like 'Red Alert'. Shri. C. Muraleedharan, GSI enquired whether the Vizhinjam Port construction has any impact on the recent coastal erosion in Valiyathura.Dr.V.Nandakumar replied that cyclicity of the swells are being monitored.

Chairman highlighted the need for mapping of river profile including the dams and dynamic sand auditing.

55.11.0 Shri. Prasanth.S.Hedge Senior Mining Geologist, IBM, Bangalore presented the programmes carried out. He stated that no mining lease or valid PLA is sanctioned and clarification from Ministry of Mines is pending concerning the mining lease of Bauxite and

Aluminous Laterite. Shri. Mathew Joseph, GSI informed that they are exploring platinum potential areas and the same is in G3 stage.

Action GSI & IBM

55.12.0 Shri. T.A Shaji, Officer in charge, AMD presented the programmes completed during the review period. They are still continuing the programs of 2013-2016, in Chavara deposit and forwarded data of 19 mineral deposit configurations to the Chairman, Atomic Energy Division.

Action AMD

55.13.0 Dr.J.Anzari, CSIR-NIIST presented the work carried out during the past year. Beach erosion studies were carried out by IIT Chennai and CPWRS and suggested a consultant regarding establishing of groins. Shri.Sakhare, CSIR-NIIST presented remote sensing perspectives for mining fraternity and discussed about the IBM circular on cadastral maps.

55.14.0 Shri.A.G.Gopakumar, State Groundwater Department delivered an overview of various schemes carried out and highlighted the need for controlled mining aspect. He also commented that the theme of new scheme of National hydrology project is Water budgeting.

55.15.0 Shri. Sony K Kuriakose, Malabar cements Ltd., Walayar explained three programs and its progress. Shri. Samson A., Senior Manager, Kundara Ceramics Limited thanked the Director, Department of Mining and Geology, for conducting the exploration from which 8 lakh metric tones' can be extracted over next 20 years.

55.16.0 Shri.C.K.Baiju, Deputy Director, State Mining and Geology presented the work done during the review period and the proposed programs for the year 2018-'19. He emphasised the need for analysis of major causative factors of landslides in the Idukki district and around mining areas by GSI.

Action GSI

55.17.0 Dr.V.Nandakumar, NCESS emphasised the necessity of EIA studies; Shri. Prashanth S. Hegde, IBM upheld for the same and proposed NIRM to carry out such studies. Shri.C.Muraleedharan, Dy. DG, GSI told that they will concentrate on

recommendations concerning remedial measures for each landslide area individually. Dr. V. Nandakumar highlighted the lack of rehabilitation and mine closure activity.

Action IBM/GSI

55.18.0 Shri. Manoj Cherian, Dy. Manager, KMML brought to light that clearance for capacity expansion was held up. Administrator, SEIAA informed that the committee is expected to be created within two months.

Action SEIAA

55.19.0 Dr. S.N Kumar highlighted the importance of formation of full-fledged specialised geology cell in the Department of Mining and Geology for provision of technical advice in time bound manner. Shri. Biju Sebastian, State Mining and Geology emphasised that, in the first hour of occurrence of natural hazards, geologists are the people to visit primarily as they are at proximity to the site. Dr. V. Nandakumar, NCESS told that SGPB should take initiative for strategy to obtain an establishment for interdisciplinary interactions in the state.

Action DMG

55.20.0 Chairman opined that board should recommend the proposal to Higher Education Department to start Mining Engineering diploma and B.Tech courses. He also suggested incorporation of three new members in SGPB forum CWRDM, KSREC and KSLUB. He urged the need to encourage infrastructure development. For the rational harvesting of resource, board members can devise schemes, programmes or suggestions which can be taken up by the policy makers and then to the administrators for implementation.

Action DMG

Shri. T.K. Ramakrishnan, Additional Director, State Mining and Geology Department, delivered the vote of thanks. He duly thanked the dignitaries from various organizations for their presence, active participation and valuable deliberations during the meeting.

The 55th SGPB meeting concluded at 14.30 Hrs.

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Biju
20/12/18

LIST OF PARTICIPANTS OF THE 55th MEETING OF SGPB

HELD ON 17TH SEPTEMBER 2018

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