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Organised by

India Meteorological Department Regional Meteorological Centre, Chennai 600 006.

on

25thApril 2024

at NIOT campus, Pallikaranai, Chennai

1. Background

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☆ ☆ Weather and climate exert a strong influence on human activities. Agricultural, shipping, fishing, aviation, tourism, construction and various other sectoral communities require weather and climate information for effective planning of relevant activities. Role of weather and climate parameters on agriculture is best portrayed by the description of the Indian economy, basically being driven by agricultural produce, as a gamble on Indian monsoon. Also, vulnerability of about 7500 km vast coastline of India to the devastations caused by landfalling cyclones over theBay of Bengal and the Arabian Sea, which, often lead to substantial loss of life and property, is another cause for concern. The major goal of various national and international meteorological programs is to minimize the adverse and maximize the positive socio-economic consequences of weather and climate forecasts. India Meteorological Department (IMD), ever since its establishment in 1875, has been striving hard to achieve this goal.

However, highly complex and dynamic nature of meteorological parameters makes weather forecasting a formidable task. With the likelihood of more extreme weather events in the global warming and climate change scenario, challenges in weather forecasting are increasing manifold. As such, the meteorological communities, worldwide, regularly upgrade their forecasting facilities and capabilities and make use of all available observations from multiple platforms, numerical guidance from computer model forecasts, scientific theory, and experience to arrive at a forecast. After all this exercise, proper utilization of these forecasts would depend upon the forecast characteristics, viz., *timeliness, accuracy* and *relevancy* of the forecast as well as timely dissemination of disaster warnings and effective implementation of disaster management strategies. Thus, multiple stakeholders, including civil administrators, disaster managers and print & electronic media contribute significantly towards minimizing loss of life and property and deriving greater socio-economic value from the forecast. Regular interaction with the stakeholders is an important component in this exercise.

As in the past, Regional Meteorological Centre, Chennai which is entering into its 80th year of service to the southern region of the country, engaged with the various stakeholders, now, to take stock of the current forecast characteristics and their socio-economic value with regard to various sectorial applications and to chalk out the path to meet the future challenges from the perspectives of technological advancements, urbanization, extreme weather, impacts of climate change etc. A **Stakeholders' Meet** on *Meteorological services for Weather Ready & Climate Smart Nation* served as a platform for exchange of ideas between the weather service providers and its users for generation of improved impact based weather forecasts and its maximum utilization for minimizing loss of life and property and betterment of society at large.

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India Meteorological Department (IMD), the National Weather Service of the country, was founded in 1875 and is one of the pioneering scientific institutions in the country. IMD commemorates its 150th Foundation Day on 15th January 2025. IMD has planned for a year long celebration across the country to commemorate this milestone event. Regional Meteorological Centre (RMC), Chennai which caters to IMD's mandates for the southern Indian region was established in 1945 and would be completing 80 years of service to the nation on 01st April 2025. As a part of commemoration of both these milestones, RMC Chennai organized a Stakeholders' meet at the NK Panikkar Hall & Rajendra Chola Hall, National Institute of Ocean Technology (NIOT), Pallikaranai, Chennai on 25.04.2024. 82 delegates from various user agencies participated in the meet.

3. Inaugural session

The inaugural session was held at the NK Panikkar Hall, NIOT Chennai. About 230 persons including officers from the state & central government line departments, sister scientific institutions (NIOT and National Centre for Coastal Research (NCCR) Chennai), retired IMD officials from Chennai were invited for the inaugural programme. Copy of the invitation to the inaugural programme is presented in Appendix-1.

The session commenced at 09:30 IST with the invocation song Tamizh ThaiVaazhthu. To embark on a journey of reflection and inspiration the IMD theme song that echoes the legacy, dedication and services of IMD was played in Hindi and Tamil. Dr.S.Balachandran, Deputy Director General of Meteorology (DDGM) and Head, RMC, Chennai welcomed the delegates and presented an overview of the purpose for organizing the stakeholders' meet.

After formal felicitations, Dr. M. Mohapatra, Director General of Meteorology (DGM), IMD addressed the gathering and briefed about the history of IMD, various services of IMD, contributions of meteorological officials in various regions over the country.

A Souvenir on 80 years of meteorological services to the southern region by the Regional Meteorological Centre (RMC), Chennai was released by Dr. M. Ravichandran, Secretary, Ministry of Earth Sciences. A Coffee Table Book on Activities of RMC Chennai was released by Shri S.K. Prabakar Sir, IAS, Additional Chief Secretary & Commissioner of Revenue Administration & Disaster Management, Government of Tamilnadu. A Video capsule - Journey of Regional Meteorological Services was released by Dr.J.Radha Krishnan, IAS, Additional Chief Secretary & Commissioner of Greater Chennai Corporation, Government of Tamilnadu. A Photo panel of the 22 Heads of RMC Chennai, who have served from 1945 – till present was unveiled by Dr. M. Mohapatra, Director General of Meteorology.

After the releases, very senior retired IMD officers (Dr.N.Jayanthi, ADGM (retd.), Shri A.K.Bhatnagar, ADGM (retd.), Shri S.K.Subramanian, DDGM (retd.), Dr.R.V.Sharma, DDGM (retd.), Dr.Y.E.A.Raj, DDGM (retd.), Dr.S.R.Ramanan, Director

(**retd.**)) who have made significant contributions at RMC Chennai towards IMD's growth at different points of time were felicitated.

Dr. G.A. Ramadass, Director, National Institute of Ocean Technology (NIOT) addressed the gathering about the journey of IMD and its invaluable contributions to the society with technological advancements and improvements in its weather monitoring and predicting capabilities, from time to time, to minimize loss of life and property.

Shri.S.K.Prabakar, IAS, Additional Chief Secretary & Commissioner of Revenue Administration & Disaster Management, Government of Tamilnadu, in his special address appreciated IMD's recent initiatives for impact based forecast and special bulletins during the recent occurrences of heatwave in Tamilnadu.

Dr.J.Radhakrishnan, IAS, Additional Chief Secretary & Commissioner of Greater Chennai Corporation, Government of Tamilnadu, in his special address appreciated IMD's early warning services and briefed about the role of disaster management authorities and their effective relief measures to the regions impacted by natural calamities.

Dr.M.Ravichandran, Secretary, Ministry of Earth Sciences in his keynote address made a special mention on the importance of observations and Numerical Weather Prediciton (NWP) models for improving the accuracy of forecasts and the role of disaster management authorities in using the scientific information for a major societal cause of disaster risk reduction.

Dr.B.Amudha, Scientist – F, IMD Chennai expressed her sincere gratitude to the Chief guest, Dr.M.Ravichandran, Secretary MoES, Guests of Honour - Shri.S.K.Prabakar, IAS, Additional Chief Secretary & Commissioner of Revenue Administration & Disaster Management, Government of Tamilnadu and Dr.J. Radha Krishnan, IAS, Additional Chief Secretary & Commissioner of Greater Chennai Corporation, Government of Tamilnadu, stakeholders, Director, NIOT, Dr.M.Mohapatra, DGM IMD, Dr.S.Balachandran, Head, RMC Chennai, media and all IMD officials present for their active participation and invaluable support.

The inaugural session then came to a close by around 11:00 IST.

4. Technical Sessions

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The meet was held in two technical sessions at the Rajendra Chola Hall, NIOT Chennai. Detailed programme of the entire event is given in Appendix-2.

4.1 Delegates and Participating Organisations

82 delegates participated in the Stakeholders' Meet from around **33 institutions** including representatives from the State and Central Government offices who directly benefit from the weather services provided by IMD. The list of delegates is furnished in Appendix-3.

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☆ ☆ 4.2.1 Presentations by IMD

Chairpersons: Dr. N.Jayanthi, ADGM (retd.) IMD & Dr.Y.E.A.Raj, DDGM (retd.) IMD

Rapporteur: Dr.B.Geetha, Scientist - D, IMD Chennai

During the Technical session-I, IMD's services to the stakeholders were presented and then feedback from various user agencies were taken. This session was chaired by Dr.N.Jayanthi, Additional Director General of Meteorology (Retd.) IMD & Dr.Y.E.A.Raj, Deputy Director General of Meteorology (Retd.), IMD. Dr.B.Geetha, Scientist-D, IMD Chennai served as the rapporteur.

Dr.M.Mohapatra, DGM, IMD discussed about the various services provided by IMD. He detailed about the various bulletins, warnings & graphics issued by IMD to various stakeholders, recent improvements in the early warning services of IMD & vision and mission of IMD for the next 25 years.

Dr.S.Balachandran, Scientist-G & Head, RMC Chennai gave a detailed description of contents of general weather forecast and warning bulletins including daily & weekly weather bulletins, nowcast warnings, extended range forecasts, cyclone warning bulletins, fishermen warnings, port warnings, coastal weather bulletins for marine community, impact based forecasts, graphical warning products & social media posts during significant weather periods.

Shri P.Senthamarai Kannan, Scientist-F I/C, Regional Weather Forecasting Centre (RWFC), RMC Chennai discussed about the agro-meteorological advisories and hydrometeorological bulletins for flood monitoring and warning services. He also detailed about the recent implementation of block level forecasting.

Dr.V.R.Durai, Scientist-F I/C, **Aerodrome Meteorological Office** (AMO) Chennai presented the meteorological services provided to the aviation community including online briefing system for pilots regarinding aerodrome warnings, terminal aerodrome forecasts, route forecasts, significant weather warnings & warnings for light aircrafts.

4.2.2 Users feedback

From the users side, representatives from the State Disaster Management Authority (SDMA), Greater Chennai Corporation (GCC), Police department, National Disaster Response Force (NDRF),TN-Disaster Response Force (TNDRF), TN-Electricity board, Airports Authority of India (AAI), airlines operators, Port authorities & Central Water Commission (CWC) spoke and provided feedback. The following are the salient feedback points from the users:

(i) Shri C. Umashankar, DGM (Marine) Kamarajar Port Limited (Ennore port) requested for

providing marine meteorological services similar to aviation meteorological services.

(ii) **Shri Anbalagan, Airports Authority of India** appreciated the services of Meteorological Watch Office (MWO), AMO Chennai and discussion in detail about maintenance of runway Metparks

(iii) **Airline operators committee** requested for monitoring of Adyar river flow and flood warning for airports during cyclone periods.

(iv) Shri Mani, Deputy Commissioner of Police, Tambaram and Shri Sudakar, Deputy Commissioner, NDRF requested for separate training programmes for various users.

(v) **Shri Sanjeev Kumar, Central Water Commission**, requested for high resolution rainfall forecast map for Chembarambakkam lake area.

(vi) Shri Vaidyanathan, TN-SDMA spoke about the real time flood forecasts for Tamilnadu.

(vii) Shri C.Lakshmanan, Tamilnadu Water supply And Drainage board (TWAD), Chennai requested for station-wise rainfall details for all districts daily.

(vii) a few users requested for sharing of bulletins and warnings through email.

4.2 Technical Session-II : Panel Discussion and Valedictory

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Chairpersons: Shri A K Bhatnagar, ADGM (Retd.), IMD & Dr R V Sharma, DDGM (Retd.), IMD

Rapporteur: Dr Arvind Kumar, Scientist-D, RMC Chennai

After the presentations by the keynote speakers and extensive interactions and feedback from stakeholders during the Technical Session-I, the panel discussion and valedictory session were held. A comprehensive discussion was conducted by a panel chaired by Shri A K Bhatnagar, ADGM (Retd.), and co-chaired by Dr. R V Sharma, DDGM (Retd.). Panel members included Dr.M.Ravichandran, Secretary-MoES, Dr.M.Mohapatra, DGM-IMD, Dr.Muruganantham, General Manager (CNS), Airports Authority of India, Shri C. Umashankar, DGM, Kamarajar Port Limited, Dr. (Mrs). N.Jayanthi, ADGM (Retd.), IMD & Shri S.K.Subramanian, DDGM (Retd.), IMD were the panel members.

The panel members discussed on *the user feedback, gap areas and way forward*. Shri M. Devaraj, representative from the M S Swaminathan Research Foundation, Chennai; and Shri Vaidyanathan, Director of State Disaster Management Authority, Chennai also participated actively in the discussions.

Dr. R V Sharma, DDGM (Retd.), IMD expressed his concern regarding climate change, emphasizing the need to focus on reducing greenhouse gas emissions. He highlighted global warming and environmental degradation as challenges facing our community and urged various user agencies to develop action plans at their respective levels to protect the environment.

Dr. M Ravichandran, Secretary, MoES, reiterated on improvements in all four major components in weather forecasting - (i) observations, (ii) understanding, which is the science of meteorology (R&D), (iii) modelling, and (iv) forecasting and dissemination. He mentioned that while the first and last components are handled mainly by IMD, the second and the third components are addressed by

all scientific institutions under MoES through rigorous R&D and modelling programmes.

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☆ ☆ He noted that observation is particularly important because the observed data is fed into the model, which ultimately predicts the weather for the coming days. He added that the more data we have, the greater the accuracy of the forecast. He also mentioned that he came to know that a number of automatic weather stations have been installed by the state government in many districts and blocks. Therefore, our major emphasis should be on data collection. He urged stakeholders from various departments of state and central government to share their data with IMD. He informed that the IMD has been receiving data from the Airport Authority of India for the past year. He emphasized that upper atmospheric data is very important and appreciated the efforts made by the AAI.

Dr. M. Mohapatra, DGM, IMD, informed that there are numerous products available on the IMD website, which stakeholders can use according to their needs. He added that users can obtain weather information for their desired location through the "MAUSAM" mobile app. Different types of stakeholders require customized information. He mentioned that if users encounter any difficulties in accessing weather information, they can directly call, email, or WhatsApp IMD for assistance. He further added that success is only achieved when users understand the limitations of IMD products. He urged stakeholders to actively participate throughout the year.

The DGM emphasized that stakeholders should rely solely on the final forecast from IMD, as it integrates inputs from all models and adds substantial value. He elaborated that the final forecast undergoes rigorous daily discussions among the 26 Meteorological Centers, 6 Regional Meteorological Centers, and the National Weather Forecast Center in New Delhi. IMD is committed to refining and expanding its services continuously. The DGM recommended that RMC Chennai share contact details with stakeholders for future communication regarding weather services.

Shri S K Subramanian, DDGM (Retd.),IMD, commended the forecast accuracy and advancements in forecasting. He acknowledged room for further improvement in our forecasts, reminiscing about his service days when color-coding wasn't in use. He expressed appreciation for the introduction of the color-coding concept. He recommended that IMD enhance its services through regular interaction with stakeholders. Additionally, he suggested organizing stakeholder meetings annually before the onset of the monsoon season. These meetings could be structured department-wise, unit-wise, involving various organizations such as the Department of Police, Airport Authority of India, Municipal Corporation, Agriculture Department, etc.

Dr. N. Jayanthi, ADGM (Retd.), IMD underscored the significance of observing and communicating weather services among stakeholders. She emphasized the necessity of a robust algorithm for achieving forecast accuracy and highlighted the effectiveness of various dynamic models. As a forecaster, she recommended studying model development procedures to enhance forecast comprehension. Dr. Jayanthi expressed concerns regarding the challenges in predicting extreme weather events and advocated for the use of user-friendly language in scientific inputs. She emphasized the pivotal role of decision-making content in forecasts and stressed the importance of increasing weather observing instruments and capacity building for improved accuracy. Dr. Jayanthi suggested strengthening partnerships among various agencies involved in such activities and proposed

strategies for translating research into operational forecast systems.

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☆ ☆ Shri C. Uma Shankar, DGM (Marine) of Kamarajar Port Ltd., requested that IMD should offer regular forecasting services for ships akin to those available for aircraft.

Shri Muruganathan, GM (CNS), Airports Authority of India, mentioning the 17 Sustainable Development Goals outlined by the United Nations, highlighting Climate Action, Life Below Water, and Life on Land as directly relevant to us. Among these goals, urgent action to combat climate change and its impacts is emphasized. Additionally, goals related to conserving oceans and marine resources, as well as protecting terrestrial ecosystems and biodiversity, were underscored. He stressed the collective responsibility to work towards achieving these goals. Shri Muruganathan suggested that sister organizations provide weather data to IMD to enhance forecast accuracy and noted AAI's regular sharing of weather data with IMD. He mentioned AAI's efforts to reduce its carbon footprint through aircraft design and highlighted the creation of a WhatsApp group to facilitate communication among partners.

Dr. S. Balachandran, DDGM, RMC Chennai, emphasized the significant role that artificial intelligence (AI) can play in various weather forecasting services. Drawing from experiences during Cyclone 'Michaung' in December 2023, he highlighted how AI facilitated NRI individuals from abroad in ensuring the safety of their parents. He urged stakeholders to utilize the IMD website and encouraged them to reach out via call, email, or WhatsApp to RMC Chennai if they encounter difficulties understanding terminologies or accessing desired information.

Shri Vaidyanathan, State Disaster Management Authority (SDMA) commended the efforts in issuing impact-based forecasts and inquired about the customization of IBF to align with users' requirements. He proposed establishing a standardized protocol for ARG data and stressed the importance of calibrating rooftop weather instruments to rectify any discrepancies. Additionally, he highlighted SDMA's development of a drought monitoring mechanism and collaboration with IITM Pune for lightning occurrence forecasts. He mentioned the existing MoU between SDMA and IMD. Furthermore, he recommended convening a Stakeholders' meeting at least once a year.

Shri M. Devaraj, Nodal Officer-AMFU Kanniwadi, M S Swaminathan Research Foundation, highlighted that farmers prefer receiving only the key highlights of the weather forecast rather than the detailed forecast. He recommended establishing effective coordination between IMD and state authorities responsible for disseminating the forecast. Mr. Devaraj emphasized the popularity of voice messages among farmers due to their compatibility with low internet connectivity, particularly in remote areas or villages. He proposed the development of a specific mobile app for insurance and travel purposes.

In his concluding remarks, **Shri A. K. Bhatnagar, ADGM (Retd.),** the Chairperson of the panel discussion group, emphasized the necessity of regular meetings with stakeholders. He stressed that these meetings are essential for issuing need-based forecasts tailored to users' requirements.

The session concluded at about 15:45 IST with a formal vote of thanks delivered by **Dr. B. Geetha**, **Scientist-D**, RMC Chennai followed by *National Anthem*.

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	s streamed live (<u>https://www.youtube.com/watch?v=lnK-8QutcNY&t=4835s</u>). A few
pnotographs ta	ken during the event are presented in Appendix-4.
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ppendix-2	
agistration (PROGRAMME
	9:00 – 09:30 IST) ion- (09:30 – 10:45 IST) (NK Panikkar Hall, Ground Floor)
Time (IST)	Event
09:30-09:35	Invocation & Lighting of lamp
09:35-09:40	IMD Theme song
09:40-09:45	Welcome address by Dr.S.Balachandran, Head, RMC Chennai
09:45-09:50	Honouring the chief guest and the guests of honour
09:50-09:55	Address by Dr.M.Mohapatra, Director General of Meteorology, IMD
09:55-10:00	Release of <i>Souvenir</i> on 80 years of RMC, Chennai
	Release of Coffee Table Book on Activities of RMC Chennai
	Release of Video capsule - Journey of Regional Meteorological Services
	Unveiling of photo panel of Heads of RMC Chennai (1945-present)
10:00-10:05	Felicitation of senior retd. IMD officers from RMC Chennai
	Dr.N.Jayanthi, ADGM(retd.), Shri A.K.Bhatnagar, ADGM (retd.),
	Shri S.K.Subramanian, DDGM(retd.), Dr.R.V.Sharma, DDGM (retd.),
	Dr.Y.E.A.Raj, DDGM (retd.), Dr.S.R.Ramanan, Director (retd.)
<u>10:05-10:10</u>	Address by Dr.G.A.Ramadass, Director, NIOT
10:10-10:20	Address by Shri S.K.Prabakar, IAS, the Commissioner of Revenue
10:20-10:30	Administration & Disaster Management, Govt. of Tamilnadu
10:20-10:30	Address by Dr.J.Radhakrishnan, IAS, the Commissioner of Greater Chennai Corporation, Govt. of Tamilnadu
10:30-10:40	Address by the Chief Guest, Dr.M.Ravichandran, Secretary MoES
10:40-10:43	Vote of thanks by Dr.B.Amudha, Scientist-F, IMD Chennai
10:43-10:45	National Anthem
	High Tea: 10:45-11:15 IST
1	Press meet: Secretary MoES, DGM IMD & DDGM RMC Chennai
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echnical sessi	on -I (11:15 – 13:30 IST): Interaction with stakeholders & feedback (Rajendra
Chola Hall, Fi	
Chairpersons :	Dr.N.Jayanthi, ADGM (retd.) IMD & Dr.Y.E.A.Raj, DDGM (retd.) IMD
apporteur: I	Dr.B.Geetha, Scientist-D, IMD Chennai
Time (IST)	Talk
11:15-11:30	Weather monitoring & forecasting services of IMD – Dr.M.Mohapatra, DGM
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11:30-11:40	Regional Weather Services of IMD – Dr.S.Balachandran, Scientist-G &
11 40 11 70	Head, RMC Chennai
11:40-11:50	Regional Hydromet and Agromet forecasting products and Dissemination for
	Tamilnadu, Puducherry & Karaikal - Shri P.S.Kannan, Scientsit-F, RWFC Chennai
11:50-12:00	Aviation products & Dissemination – Dr.V.R.Durai, Scientist-F , AMO
11:50-12:00	Aviation products & Dissemination – Dr.v.R.Durai, Scientist-F, ANO Chennai
12:00-13:30	Feedback from various user agencies

Lunch: 13:30-14:30 IST <u>Fechnical session –II (14:30 – 16:00): Panel discussions & Valedictory</u>		
<u>MD</u>		
	nri.Arvind Kumar, Scientist-D, IMD Chennai	
Time (IST) 14:30-15:30	EventPanel discussion on user feedback, gap areas & way forward	
	Dr.M.Ravichandran, Secretary-MoES, Dr.M.Mohapatra, DGM-IMD,	
	Dr.Muruganantham, General Manager (CNS), Airports Authority of	
	India, Shri C. Umashankar, DGM, Kamarajar Port Limited, Dr. (Mrs). N.Jayanthi, ADGM (Retd.), IMD & Shri S.K.Subramanian, DDGM	
	(Retd.), IMD	
15:30-15:40	Vote of thanks – Dr.B.Geetha, Scientist-D, IMD Chennai National Anthem	
	Tea: 15:40-16:00 IST	

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	opendix-3 LIST OF DELEGATES WHO PARTICIPATED IN THE MEET		
S.No.	Name & Designation	Affiliation	
1	Shri. C.Lakshmanan, Deputy Hydrogeolist	Tamilnadu Water Supply & Drainage Board	
2	Shri.V.Elamgovan, Asst. Hydrogeolist	Tamilnadu Water Supply & Drainage Board	
3	Lieutenant Commander Beena Jain, Senior Met Officer	Indian Navy	
4	Ms.F.Persis, Superintendent	Tamilnadu Maritime Board	
5	Shri.P.D.Ajeeth Kumar, Asst.Executive Engineer	Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB)	

5	Shri.P.D.Ajeeth Kumar, Asst.Executive Engineer	Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB)
6	Smt. Latha Balakrishnan, DGM(CNS)	Airports Authority of India (AAI) CHENNAI
7	Sh. Ramesh Raghu, M(CNS)	AAI CHENNAI
8	Shri. Anbalagan S.A, Asst. General Manager	AAI CHENNAI
9	Shri. Vignesh Shunmugam R, Asst. Manager	AAI CHENNAI
10	Shri. A. Jayavardhan JGM(Ops)-ASM	AAI CHENNAI
11	Shri. M.T. Renish SM(Ops)-ASM	AAI CHENNAI
12	Shri.V.Muruganandam, General Manager (CNS)	AAI CHENNAI
13	Shri. Mohd.Shahid, General Manager (ATC)	AAI CHENNAI
14	1. Dr. T. Sivasankari Devi, {Technical officer)	Tamil Nadu Rice Research Institute
15	2. Mr.M. Kumaraguru, (Agromet Observer)	Tamil Nadu Rice Research Institute
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16	Mr. V. Elumalai, Assistant District Officer,	Tamil Nadu Fire and Rescue Service
17	Mr. A. Thanapal, Assistant District Officer,	Tamil Nadu Fire and Rescue Service
18	Thiru.L.A.G. Julius Edward, Deputy Director	Department of Fisheries & Fishermen Welfare
19	Dr.B.Arthirani, Asst Professor & Technical Officer	AgroMeteorological Field Unit (AMFU) Kovilpatti
20	Tr. Mani, Deputy commissioner of Police	Tambaram Commissioner office
21	Dr.Thanga thamilvanan, Nodal Officer & Professor and Head	Tamilnadu Veterinary & Animal Science University
22	Dr.D.Divyalakshmi, Asst Professor	Tamilnadu Veterinary & Animal Science Universit
23	Mr. M. Devaraj, Development Coordinator	M. S. Swaminathan Research Foundation.
24	Shri. C.Umashankar, DGM (MS)	Kamarajar Port Limited, Ennore
25	Er. V.R.Sumathi, Executive Engineer	Water Resource Department
26	Er.T.Vimalaveni, Asst. Executive Engineer	Water Resource Department
27	Er.Brindha Sangeetha, Asst. Executive Engineer	Water Resource Department
28	Dr.J.Gokila, Technical Officer	Pandit Jawaharlal Nehru College of Agriculture & Research Institute, Karaik
29	Shri. K.Sanjeev Kumar, Assistant Director-II	Central Water Commissio Chennai
30	Tmt. Lakshmi, IPS, Inspector General of Police	Police Department
31	V V Manoj kumar , Duty officer	Spicejet airlines Ltd
32	Er.S.Loganathan, Executive Engineer	Tamilnadu Generation & Disribution Corporation (TANGEDCO)

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33	Er.A.Abdul Ajas, Asst Executive Engineer	TANGEDCO
34	MD Tanwir Hussain Airport Manager	British Airways
35	P.G. Srividhya, Deputy Director of Agriculture	Commissionerate of Agriculture, Chepauk, Chennai - 5
36	Shri.C. Muthukumaran, Joint Director (DM)	Tamilnadu Disaster Ri Reduction Agency (TNDRRA)
37	Shri.A. Karthikeyan, Assistant Commissioner (DMR)	TNDRR
38	Shri.T.Kanthimathinathan Water Resources Management Expert (WRME)	TNDRRA
39	Dr.R.Murugananth, Capacity Building Specialist (CBE)	TNDRRA
40	Shri.T. German Amali Jacintha, Geographical Information System (GIS) Specialist	TNDRRA
41	Shri.S.Sivakumar, Application Development Specialist, RIMES.	TNDRRA
42	Shri.V.Naveenkumar, Junior Desk Person, SEOC, TNDRRA	TNDRRA
43	Shri.T.Anbudas,Desk Person, SEOC, TNDRRA	TNDRRA
44	Shri.K. Subramani, Desk Person	Chennai District Collectorate
45	Shri.E. Praveenraj, Desk Person	Tiruvallur District Collectorate
46	Shri.M.Mohammed, Uvalz Desk Person	Kanchipuram District Collectorate
47	Shri.R. Sakthikannan, Desk Person	Villupuram District Collectorate
48	Shri.A.Anandan,Desk Person	Cuddalore District Collectorate
49	Shri.R.Vinoth, Desk Person	Mayiladuthurai Distric Collectorate
		Nagapattinam District

51	Shri.T.Chandramohan, Desk Person	Tiruvarur District Collectorate
52	Shri.K.Sivakumar, Special Tahsildar (DM)	Thanjavur District Collectorate
53	Shri.V.Saravanakumar,	Tiruchirappalli District Collectorate
54	Shri.S.Ashokumar, Desk Person	Pudukottai District Collectorate
55	Shri.R.Muniyandi, Desk Person	Ramanathapuram District Collectorate
56	Shri.A.Rajaiah, Desk Person	Thoothukudi District Collectorate
57	Shri.R. Senthilkumar, Desk Person	Tirunelveli District Collectorates
58	Ms.M. Susila, Tahsildar (DM)	Kanniyakumari District Collectorate
59	Shri.T.Santhanakumar, Desk Person	Virudhunagar District Collectorate
60	Shri.P.N.Balamurugan, Desk Person	Sivagangai District Collectorate
1	Shri.M. Muneeshwaran, Desk Person	Nilgiris District Collectorate
62	Shri.V.Janaharaj, Desk Person	Coimbatore District Collectorate
63	Shri.Dinesh.S, Desk Person	Tiruppur District Collectorate
64	Shri.R.Manikandan, Data Entry	Erode District Collectorate
65	Shri.K.Muniappan, Desk Person	Salem District Collectorat
66	Shri.S.Ashokan, Desk Person	Namakkal District Collectorate
67	Shri.D.Stephenraj, Desk Person	Chengalpattu District Collectorate
68	Shri.S. Suriya Sekaran, Desk Person	Vellore District Collectorate

69	Shri.P.Balaji, Special Tahsildar (DM)	Ranipet District Collectorate
70	Cap. Uma Shankar Behara, Dock master	Chennai port Authorit Marine Department
71	Shri. J.Ilanchizhian, Addl Director	Department of Econor & Statistics
72	Ms.R,Malarvizhi, ADS	Department of Econor & Statistics
73	Shi.B.K.Thakur, Sc-D	Ministry of Earth Scie
74	Shi.V.Singaravel, ADE	Highways Department Chennai City Roads Subdivision
75	Shri. S.Ravichandran, AE	All India Radio, Chen
76	Shri.Thanavel.B.A	All India Radio, Chen
77	Shri.R.Nehru Kumar, Chief Engineer	Greater Chennai Corporation
78	Shri.S.Baskaran, SE/SWD	Greater Chennai Corporation
79	Ms.Rajeswari, ICCC Nodal Officer	Greater Chennai Corporation
80	Ms.K.Nirmala, Asst. Director	Directorate of Rural development & Panch Raj
81	Ms.S.Vidhya Lakshmi, Asst Director	Department of Horticu & Plantation crops
82	Shri.Jones Mathew Cleetus	VMC

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Appendix-4

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A few photographs taken during the meet **Inaugural Session**

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