

**MINUTES OF THE MEETING TO REVIEW PROGRESS ON THE STUDY “DEVELOPMENT OF WEB-DCRA & DSS TOOL FOR CYCLONE & ASSOCIATED IMPACTS” UNDER NCRMP (PH. II) HELD ON 03.01.2020 AT 11 AM in OPS. ROOM, NDMA BHAWAN, NDMA, NEW DELHI.**

A meeting to review progress on the study “*Development of Web based Dynamic Composite Risk Atlas (Web-DCRA) and Decision Support System (DSS) Tool*” for Cyclone & associated impacts” under NCRMP (Ph. II) was held on 03<sup>rd</sup> January, 2020 at 11 AM under the Chairmanship of Dr. Pradeep Kumar, Spl. Secretary & Project Director, NDMA, New Delhi. The meeting was attended by Officials from NDMA, the World Bank and M/s RMSI. List of participants is attached as **Annexure-I**.

2. The meeting started with a welcome note from the Spl. Secretary & Project Director, NDMA. A presentation was made by RMSI Team on overall progress achieved so far in development of Web-DCRA & DSS Tool. Compliance status of the decisions made in different review meetings, exposure database updated and polygon selection feature added in the tool were deliberated. Selective demonstration of Web-DCRA & DSS Tool was done by RMSI for few specific features/layers of the tool, such as polygone selection, power stations, slum area, etc.

3. After deliberation involving views/suggestions of participants, following decisions were taken:

- i. User enabled facility for generation of 3-D infographic map should be provided in the Web-DCRA application.
- ii. A meeting on hosting of Web-DCRA & DSS Tool will be held with IMD in 3<sup>rd</sup> week of January, 2020.
- iii. RMSI will share their views on IMD’s requirements for hosting of Web-DCRA & DSS Tool.
- iv. MoES to be approached w.r.t. requisite data (coupled model outputs) from INCOIS.
- v. RMSI to provide details of their team visit to States/UTs for collection of requisite data/information, including Officials who have visited the States/UTs and concerned Officers consulted in the States/UTs.
- vi. RMSI to contact Project Directors in NCRMP States for requisite data/information.
- vii. Available Dam related dynamic model output will be used as input in Web-DCRA. Central Water Commission (CWC) to be approached for Reservoir Dynamic Model to be integrated. RMSI will share with PMU a draft letter to be sent to CWC.

- viii. RMSI to ensure regular submission of weekly progress report in the prescribed format (*enclosed*).
  - ix. Detailed list of remaining updated exposure data required from States/UTs will be shared by RMSI with PMU.
  - x. Measured Polygon selection feature for regular geometric shapes to be also added in the Application. The selected polygon boundary should be visible in the result map.
4. The meeting ended with thanks to the Chair and all the participants.



(Narayanan, PE)  
Project Manager  
NCRMP, NDMA

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<b>Sl. No.</b>	<b>Name of Officials with Designation</b>	<b>Organisation</b>	<b>E-mail address/ Mobile No.</b>
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## Format

### Weekly Progress Report on Development of Web – DCRA & DSS Tool

Sl. No.	Review Meetings' Decisions	Compliance Status
1	Web-DCRA shall be integrated with data from IMD & INCOIS, and output/product of the application shall also be integrated with EWDS (Component A) of NCRMP (both phase I & II).	
2	Fisherman Landing Centre has to be included in the exposure database in Web-DCRA. Coastal States/UTs need to provide the data in GIS format.	
3	INCOIS to share output of ADCIRC model (Storm Surge model) coupled with Wave model through web-service on real-time basis.	
4	Best Scenarios generated from the Storm Surge models of IMD, INCOIS and IIT Delhi shall be used as input for inundation modelling.	
5	Satellite Rainfall Gauge database of recent 10 years to be used for validation of hydrological model, and Flood Model of NCCR (National Centre for Coastal Research), Chennai also to be referred.	
6	Model should be compatible with multi-model inputs from different source- creating the gateway for output of various models from different source.	
7	After finalization of User Interface (UI), all potential Early Warning Dissemination System (EWDS) and Common Alert Protocol (CAP), including data/information from IMD & INCOIS to be integrated with the Web-DCRA & DSS Tool.	
8	Updated Exposure database required for the study shall be provided by the participating coastal States/UTs.	
9	RMSI will contact OSDMA, Odisha State for data required under the project.	
10	Feedback will be sought from States/UTs after development of Beta-version and from NDMA at Alpha level of Web-DCRA.	
11	Participating Coastal States/UTs shall provide updated exposure database, including relevant information on FLCs (Fish Landing Centres) and Dam/Reservoir rule curve required for the study.	
12	State level data from AMRUT project may also be referred for the requisite exposure data.	
13	RMSI to review existing Mobile Apps such as NavIC and GAGAN. INCOIS to provide login authentication along with their User Guide to access these Apps.	

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14	Since Google API cannot be used in Web-DCRA due to problem with International Boarder, NRSC will explore possibility of sharing Bhuvan API. Once Bhuvan API is available, RMSI will explore feasibility to include in Web-DCRA.	
15	The Beta version of Web-DCRA to be shared with Coastal States/UTs for feedback. Link of the Application also to be shared with 1-2 District Collectors each in 1-2 States for feedback.	
16	RMSI to circulate PPT file including a complete report on the Cyclone 'FANI' to all Members of the Review Committee.	
17	Fully Operational Web-DCRA & DSS Tool to be completed by 31 <sup>st</sup> May, 2019. RMSI to provide report to NDMA on daily basis on development of the Web-DCRA & DSS Tool.	
18	Power Transmission Tower, Sub-station (11 KV and above), Power line & Telecom infrastructures including EWDS Tower, Slum areas and House categories (Type-wise) are to be mapped for visualization in Web-DCRA Tool.	
19	RMSI will approach concerned agencies in Coastal State/UTs for the exposure data required under the study. In this connection, RMSI will set up meeting with respective Relief Commissioner in the States.	
20	User enabled facility for generation of 3-D infographic map should be provided in the Web-DCRA application.	
21	RMSI to provide details of their team visit to States/UTs for collection of requisite data/information, including Officials who have visited the States/UTs and concerned Officers consulted in the States/UTs.	
22	RMSI to contact Project Directors in NCRMP States for requisite data/information.	
23	Available Dam related dynamic model output will be used as input in Web-DCRA. Central Water Commission (CWC) to be approached for Reservoir Dynamic Model to be integrated. RMSI will share with PMU a draft letter to be sent to CWC.	
24	Detailed list of remaining updated exposure data required from States/UTs will be shared by RMSI with PMU.	
25	Measured Polygon selection feature for regular geometric shape to be added in the Application. The selected polygon boundary should be visible in the result map.	