

Minutes of the First meeting of the Sub-Committee on development & implementation of Web-DCRA Mobile App. under the project ‘Development of Web based Dynamic Composite Risk Atlas (Web-DCRA) & Decision Support System (DSS) Tool for cyclone and associated impacts’ held on 17.03.2021; 11 AM at IMD, New Delhi.

The first meeting of the Sub-Committee on development & implementation of DCRA Mobile App. for identifying and finalizing the contents & features of Web-DCRA Mobile App’ was held on 17th March 2021; 11 AM at IMD, New Delhi under the Chairmanship of Dr. M. Mohapatra, DGM, IMD. The meeting was attended by all the Members of the Sub-Committee (formed vide NDMA OM No. 3-7/2018/PMU (vol.III)/2146 dt. 15th March 2021) and a Team of the Consultant (M/s RMSI). List of participants is attached at **Annexure-I**.

2. The Chairman explained the responsibility vested with the Committee and also elaborated on capabilities of the Web-DCRA & DSS Tool to the knowledge of the Members who were new to this development. He added that the main purpose of the DCRA Mobile App would be to enable users for easy access to the Cyclone warning information prior to the event and to provide them an option to communicate their status to the concerned during the event. Cyclone being a multi Hazard, all sectors of the community (such as Fishermen, Farmers, Ports, major industries, etc.) often will be affected from its impacts one way or other. For an effective management & mitigation, we require input from all in the form of feedback & situation reports from the Users and also from the side of early warning Agencies. Facility to access the information on ground truth via ‘crowd sourcing’ in the form of text, visuals, videos, etc and deducing valuable information via data analytics techniques would form an important utility feature of the DCRA Mobile App.

He suggested for the need of further deliberation also on what should be the volume & content of inputs via ‘crowd sourcing’ and finalizing ways and means of visualization of this data, preparation of analytics graphics, etc. There is need to visualize information received, and prepare document for further use by Disaster Managers.

He also added that the committee shall prepare a detailed document in a time bound manner well before the ensuing Cyclone Season of 2021. However, in the meantime, the work on development of the App. shall continue un-interrupted and will be closely monitored by the Committee. Relevant features of other related Mobile Applications should also be captured in the DCRA Mobile App. The RMSI team may also consult some of the existing mobile Applications (which they have already come across as per earlier meeting decisions) including the ‘THOONDIL App’ developed by NCCR.

3. The Consultant (RMSI) team presented the progress made so far in development of the DCRA Mobile App. The discussion followed is summarized below:
- (i) At present, the DCRA Mobile App has been developed as an Android Application. It should be on IOS & other platforms as well.
 - (ii) So far, 4 modules have been developed in this Mobile App, viz.; Registration; I AM SAFE, Crowd Sourcing, & User Preferences. Registration module registers the users' details like name, date of birth and his/ her relatives' mobile numbers. The mobile numbers of any 5 relatives are registered in order to send an 'alert message' to them in case the user is encountering un-warranted situation during the event. It was decided to integrate Social Media including WhatsApp for registration process as well as sending these alerts apart from SMS. The Consultant (RMSI) will provide details on the financial implications involved in integrating WhatsApp, including creation of Business account.

Also while registering; the 4 broad categories of Users viz., National, State & District Authorities, and general public (including Fishermen, etc.), the first 3 groups may be combined into one category, so that the information provided would cover the entire area affected for all of them. In other words, Boundary should be open to Users at Central, State & District level. Impact forecast maps, cyclone track, graphics from Web-DCRA, etc. to be accessed to all including general public.
 - (iii) "I AM SAFE" & "I AM NOT SAFE" module will allow users in the hazard zone to inform the registered relatives/ Disaster Managers by sending a Geo-tagged SMS. It was recommended that:
 - (a) for aiding the fishermen out at Sea, provision should be made for the Map to function in Offline mode as well (as in the case of 'Thoonle App.').
 - (b) 'Unsafe' messages should also get displayed on the web-DCRA system at EOC level.
 - (c) User statistics should be generated in terms of data analytics.
 - (iv) The 'Crowd Sourcing' module at present has been developed to enable submitting information on status of flooding, approximate wind speed, damage descriptions, for indicating the need for evacuation, need for emergency medical help, etc. Committee found that the contents need some essential modifications.
 - (a) It should be made simple by providing options to click on the category of damage (to be standardized based on the currently available documentation on damage potential associated with Cyclones).

- (b) We may not expect any quantitative information from the User via this module. (c) The options like ‘*need to be evacuated*’; ‘*need emergency medical help*’, etc. should not be linked with this module.
- (v) The ‘*User Preference*’ module prepared so far contains the option to change language, configure the data collection tool, auto sync & Map display. At present it is attempted to configure apart from Hindi & English; Bengali, Odiya, Telugu, Tamil, Malayalam, Marathi & Gujarati. Additional languages like Kannada, & Konkani should also be considered as the local language option. [It was noted that though there are different dialects spoken in the Islands (viz., Andaman & Nicobar and Lakshadweep), the official Language are Hindi and Malayalam, respectively].
- (vi) It was suggested to incorporate an automatic notification feature in the App. The notification could be the message prepared by IMD and shared via FTP.
- (vii) An Online Survey Form to be created by RMSI in coordination with Meity, and the survey link to be circulated by IMD to all concerned Stakeholders: RMSI shall prepare a draft questionnaire for conducting the User Survey (for understanding the Users’ expectations from this kind of Application) in co-ordination with NDMA and IMD by 19th March 2021. NDMA & IMD shall be carrying out this survey among the concerned stakeholders including coastal population, Fishermen, Fisheries Authorities, Farmers, Fire & Disaster Managers, Emergency Services, Revenue Department Officials, Aapada Mitra, Community Volunteers, Cyclone Shelter Managers, etc. This survey shall be conducted via the “*Rapid Assessment System*”, a platform developed by MeitY, after requisite customization. [**Action: RMSI, NDMA, IMD & MeitY**]
- (viii) By 19th March 2021, RMSI shall share the progress made based on the action suggested in this meeting and the committee will keep on interacting via E-Mail till the finalization of the task. First level (Level Zero) development of the DCRA Mobile App to be shared by RMSI by 19th March 2021.
- (ix) A virtual meeting is proposed to be held on 25th March 2021 (meeting time & link will be shared in due course) for evaluating the further progress and prioritizing the future course of action.

4. The meeting ended with vote of thanks to the Chair and all the participants.


19.03.2021
(Sanjay K Sharma)
Project Manager
NCRMP, NDMA

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Sl. No.	Name of Officials with Designation	Organisation
1	Dr. M.V. Ramana Murthy Director	NCCR
1	Dr. Tune Usha Scientist ‘G’	NCCR
3	Dr. Sanjay K Sharma Env. Specialist, PMU	NDMA
4	Mr. Vijay Kumar Sharma Manager (IT), PMU	NDMA
5	Mr. Anup Karanth, TTL & Sr. DRM Specialist	The World Bank
6	Dr. Vikas Sheel Gupta Scientist, UMANG	MeitY
7	Ms. Sunitha Devi S. Scientist ‘F’, Cyclone Warning Division	IMD
8	Dr. Sankar Nath Scientist ‘E’	IMD
9	Mr. Pushpendra Johari Team Leader	M/s RMSI
10	Dr. Sushil Gupta, Dy. Team Leader	M/s RMSI
11	Mr. Rajneesh Kumar Sr. Software Engineer	M/s RMSI
12	Mr. Sachin Jalota Sr. Software Developer	M/s RMSI