

## TECHEMERGE RESILIENCE INDIA CHALLENGE

### MONTHLY PROGRESS UPDATE

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| Progress Update          | <input type="checkbox"/> Yearly<br><input type="checkbox"/> Quarterly<br><input type="checkbox"/> Monthly   |
| Reporting Year:          | <input type="checkbox"/> 2020<br><input checked="" type="checkbox"/> 2021<br><input type="checkbox"/> 2022<br><input type="checkbox"/> 2023<br><input type="checkbox"/> 2024<br><input type="checkbox"/> 2025 |
| Reporting Period (Month) | August 2021   |
| Project Title:           | TechEmerge Resilience India Challenge   |

#### Summary of Achievement

The reporting period of August month saw some key progress in the implementation of activities by all the nine innovators working in tandem with their respective SDMAs in a full-fledged implementation mode. Besides, the monitoring of the Tech-Emerge implementation has been further buttressed thanks to the intervention of the National Disaster Management Authority (NDMA) along with the World Bank Group. In this succession the NDMA & World Bank organized Virtual Progress Review Meeting of TechEmerge implementation which was facilitated by the ADPC. The Virtual Progress Review Meeting was also attended by all the four SDMAs. Simultaneously, the World Bank is also holding separate regular meetings with ADPC for stock taking of the Tech-Emerge implementation.

At regular intervals, the innovators are continuing to organize virtual meetings with the SDMAs. The ADPC along with RIKA-IIT are also attending these meetings and providing technical inputs as and when required in the implementation process.

The ADPC organized a virtual meeting RIKA-IIT and Innovators who are exclusively working for HP-SDMA. The meeting provided an opportunity of bringing integration in the relation of RIKA-IIT and Innovators and cohesiveness in the TechEmerge Implementation. It also provided the contextual information of the Tech Emerge falling under the larger CARE Project. As a next step, ADPC also organized a separate HP-SDMA, RIKA-IIT and Innovators meeting as well. One of the key outcomes of the meeting that it clarified the role of RIKA-IIT who is a part of the ADPC implementation team in principle and would be acting as an interface between SDMAs and Innovators. RIKA-IIT also introduced its technical monitoring plan in the meeting that generated a common understanding among the participants about the monitoring framework.

During this reporting period, only Numer8 is still waiting to go ahead with their implementation due to certain administrative challenges.

The Climate Innovation Coordinator already based in India is continuing to provide all the necessary support to the implementation of the TechEmerge Resilience India Challenge in consultation with the Grant Management Specialist and the Grant Management Officer.

### Grantee Status Update

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| IdeaForge          | They are progressing well in the implementing the milestone 1. They are collecting topographical & weather data, and other requirements of SDMA (for Unmanned Aerial System) to develop the alpha prototype. Authorization for flight testing are nearly complete landslide area surveys are complete.  |
| Quantela           | They are currently involved in concurrently executing all the three milestones noted below:<br>Milestone 1: Discovery phase completed (technical integration discovery and discussions with the corresponding integrating applications)<br>Milestone 2: Instance deployment is complete (customizing logos and other required items such as emails, SMS gateway, and deploying instance in cloud Environment)<br>Milestone 3 - Currently implementing the Deployment Phase (defining software requirement, create integration adaptors for integrations and develop dashboard; define SOPs and other configuration in the platform) |
| ADRC & UoT         | Although the ADRC & UoT started the implementation well on time still they are in Milestone 1 due to confronting with a few challenges (i) Setting up of data pipeline including planning and coordination meetings with SDMA. (ii) Initiated the process for fulfilling government/MNOs administrative/legal requirements (policy and technical requirements to allow past CDR data access)  |
| Nelen & Schuurmans | They are in milestone 1: Inception (setup the 3Di flood model, DEM improvements, refinement of pilot zone) They have demonstrated the 3di Technology and working on the Ravi River Basin, from its point of origin in district Kangra to Chamera 1 project in Chamba district. HPSDMA had shared some relevant studies and DDMP Chamba with them for secondary data review.4. The data for rainfall that they have requested, is chargeable so therefore the HP SDMA is bit stuck for pursuing the data requirements with financial implications.   |
| Project OWL        | They are implementing the milestone 1 that includes pilot deployment strategy – engineering, assembly & shipping of   |

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|                     | <p>devices in progress. The HP SDMA is working on defining locations to deploy emergency network (40 and 60 Solar powder Ducks. Developing materials to train local technicians and ground implementation</p>   |
| Saif Seas           | <p>As Saif Seas started the implementation little late they are now progressing well in milestone 1 that entails developing 2 Remote Operated Self Steerable Life Buoy. In the first week of September the remote operated lifebuoys would be handed over to HP-SDMA and are being readied for which they expect to visit HPSDMA.</p>   |
| SeismicAI           | <p>implement the Milestone 1 (Q1) that includes the following activities:<br/>Seismic Analysis Review; Plan review and approval by UKSDMA; set up &amp; deploy stations; systems tuning &amp; testing: Completed training for the Local integrator -Air-Jaldi. Identified potential sites for implementing the seismic stations Procured relevant equipment for the three seismic stations (except the seismic sensors) ADPC updated SDMA on the roles, status and way forward for the implementation</p>   |
| Pragathi Foundation | <p>Following the green signal received by the Uttrakhand SDMA, the SeismicAI have started to</p> <p>: Subsequent to the signing of MoU signed between UKSDMA and Pragathi Foundation the progress being made in milestone as noted below:</p> <ul style="list-style-type: none"> <li>-Identified deployment sites, modalities, liaising with end users, trainings etc.</li> <li>-The local partner, ARPAN is engaged for seeking support from the district administration to update about the CDR, and engaging local communities.</li> <li>-All the necessary technical and mountain gear procurements completed.</li> <li>-Local technical team engaged in the software development.</li> </ul> |
| Numer8              | <p>Although the concrete implementation is yet to start but in the meantime the Numer8 has completed the spadework noted below:</p> <ul style="list-style-type: none"> <li>-Field data sourcing, outreach and farmer's training Impact assessment completed</li> <li>-Team members deployed in AP, and completed initial assessment, initiated building rapport with fishermen etc.</li> </ul>  |

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|  | <p>-ADPC updated SDMA on the roles, status and way forward for the implementation</p> <p>-Awaiting kick off meeting with AP SDMA</p> |
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### Implementation challenges and action taken status

| Challenges   | Action taken  |
|--|---|
| <b>IdeaForge: Challenges are mainly technical in nature with mitigation measures in place (require negative altitude; narrow valleys hinder flying the UAV in RPV mode; integrating Megaphone on Q6 UAV; global shortage of semi-conductors)</b> | The aforesaid mitigation plan in place is facilitating IdeaForge to address these challenges.             |
| <b>Quantela: Access to API from stakeholders for integration- HRVA GIS map, Resource Maps, volunteer database.</b>   | Note-HPSDMA is in dialogue with concerned departments for accessing API)                                  |
| <b>ADRC &amp; UoT: The Mobile Network Operators (MNO) require Guarantee on data privacy; and</b>   | HPSDMA is seeking approval (certification/support) from concerned department for accessing past CDR data. |
| <b>Nelen Schurmanns: Data for rainfall is chargeable for calibrating the model.</b>  | HPSDMA is pursuing data requirements with IMD that have financial implications.                           |
| <b>Challenges are mostly logistical in nature due to the pandemic (deployment issues, shortage in the supply of solar panels and battery packs)</b>  | Awaiting COVID-19 travel restrictions.  |