

	Title of Entry	
1.1	Title of Sponsored Work	Development of Flood Warning System for Guwahati & Jorhat Towns (Annexure 8)
1.2	Name of TERI SAS Department/ Centre (s) involved	DNR
1.3	Type	Research Project
2.1	Sponsoring Agencies	NDMA, New Delhi
2.2	Location of work/activity	Guwahati & Jorhat Towns, India
3.1	List of partnering Institutions involved	TERI
3.2	Lead Partner	TERI
4.1	Begin Date	Jan 2019
4.2	Completed or Ongoing	Aug 2020
4.3	End Date	one year from the date of begin
5.1	Principal Investigator(s)--Internal	
5.2.	Principal Investigator(s)--External	Mr Prasoon Singh, Principal Investigator, TERI
5.3	Co-Principal Investigator(s) --Internal	Dr. Vinay S P Sinha, Co-Principal Investigator
5.4.	Co-Principal Investigator(s) --External	
5.3	Associated Researcher(s)--internal	Financial Support to Mr Gaurav Panchal, MSc (Geoinformatics) , TERISAS Mr Prasoon Singh, PhD Scholar, TERISAS
6.1	Amount Sanctioned	INR 6,15,560
6.2	Amount received	NO, (PO Raised to TERI) Jan / GST-8 dated Feb 2020
6.3	In Kind support	Other than Sanction amount, Logistic and travel provide by TERI
7.1	Description of work and activities	Rationale: As per the city resilience study assessment report by TERI for Guwahati, the flooding events have become very common for the city. The city has reported increasing intensities of rainfall in recent past and with issues of unmanaged solid waste, lack of drainage, reclamation of low lying lands and uncheck/unplanned urban growth, the city faces a huge risk of urban flooding each year. The report identified key vulnerable sectors facing future climate change risks and also provided various policy recommendations for a

		robust city resilient strategy. However, there is still a gap on real time flood forecasting information in the advent of an impending extreme rainfall event. TERI proposes to undertake the study with support from NDMA and other nodal agencies like IMD, State Government, NRSC, city municipal corporation, CWC and others with an aim to enhance disaster preparedness for the city level officials. Objectives: The study will focus on the potential impact of flooding and identification of flood prone areas in Guwahati City. The key objectives would be to combine GIS with Hydrodynamic models to identify flood risk in Guwahati city on experimental basis, in later stage a calibrated model will be developed for flood forecast based on different rainfall return period, along with a web based Graphical User Interface
7.2	Project Reach, engagements and beneficiaries, if applicable	Entire City of Guwahati.
8.1	List of Publications including dissemination through social media	Popular Articles in magazines and newspapers & Videos, Blog and other Social media entries 1. https://www.teriin.org/press-release/teri-and-ndma-launch-flood-early-warning-system-fews-predict-floods-guwahati 2. https://timesofindia.indiatimes.com/city/guwahati/guwahati-gets-automated-early-warning-system-to-predict-urban-floods/articleshow/77517095.cms 3. https://www.guwahatipius.com/guwahati/guwahati-gets-automated-early-warning-system-for-flood 4. https://economictimes.indiatimes.com/news/politics-and-nation/teri-launches-flood-and-heavy-rain-warning-system-for-guwahati-in-collaboration-with-ndma/articleshow/77529561.cms?from=mdr 5. https://nenow.in/north-east-news/assam/flash-floods-early-warning-system-launched-for-guwahati.html
8.2	Links to Events page, if any	1. https://www.teriin.org/press-release/teri-and-ndma-launch-flood-early-warning-system-fews-predict-floods-guwahati
9.	Executive Summary and other documents	The fully automated system, which uses advanced hydrological models to provide warning with a lead time of 72 hours, is replicable across India

Note. Per sponsored projects, this document in .doc (and not .docx) and enclosures may be zipped together and sent to iqac@terisas.ac.in, preferably in a single mail per department. Completed Projects between July 1, 2015 and July 2020 may be sent first.