	Title of Entry	
1.1	Title of Sponsored Work	Coping with Climate: Assessing Policies for Climate Change Adaptation and Transport Sector Mitigation in Indian Cities (CLIMATRANS) (Annexure 9)
1.2	Name of TERI SAS Department/ Centre (s) involved	DNR
1.3	Type	Research Project
2.1	Sponsoring Agencies	No Finance Involve (TERI & TERI SAS collaboration)
2.2	Location of work/activity	India & Bangalore
3.1	List of partnering Institutions involved	TERI
3.2	Lead Partner	TERI
4.1	Begin Date	March 2017
4.2	Completed or Ongoing	No Finance Involve
4.3	End Date	March 2018
5.1	Principal Investigator(s)--Internal	Dr. Vinay Sinha
5.2.	Principal Investigator(s)--External	Ms Neha Pahuja, TERI
5.3	Co-Principal Investigator(s) --Internal	Dr Vinay S P Sinha
5.4.	Co-Principal Investigator(s) --External	
5.3	Associated Researcher(s)--internal	Ms Ayushi Vijjhani, PhD Scholar
6.1	Amount Sanctioned	NO
6.2	Amount received	No Finance Involve
6.3	In Kind support	Travel Support
7.1	Description of work and activities	Rationale: Spatial Modeling Objectives: 1. Impact of regional Climate change and Future emission scenarios on surface O3 and PM2.5 over India Objectives: 2: Vulnerability assessment of urban Road network from urban flood.

7.2	Project Reach, engagements and beneficiaries, if applicable	No
8.1	List of Publications including dissemination through social media	Journal: Singh P., Sinha V.S.P., Vijhani A., Pahuja N. (2018). Vulnerability assessment of urban Road network from urban flood, International Journal of Disaster Risk Reduction, 28, 237-250 Pommier M., Fagerli H., Gauss M., Simpson D., Sharma S., Sinha V., Ghude S.D., Landgren O., Nyiri A., Wind P. (2018). Impact of regional Climate change and Future emission scenarios on surface O3 and PM2.5 over India, Atmospheric Chemistry and Physics, 18 (1), 103–127
8.2	Links to Events page, if any	No
9.	Executive Summary and other documents	Eleven of the world's 20 most polluted cities are located in India and poor air quality is already a major public health issue. However, anthropogenic emissions are predicted to increase substantially in the short-term (2030) and medium-term (2050) futures in India, especially if no further policy efforts are made. In this study, the EMEP/MSC-W chemical transport model has been used to predict changes in surface ozone (O3) and fine particulate matter (PM2:5) for India in a world of changing emissions and climate. The reference scenario (for present-day) is evaluated against surface based measurements, mainly at urban stations. The evaluation has also been extended to other data sets which are publicly available on the web but without quality assurance. Most of the studies on transport vulnerability consider topographic properties along with supply and demand side of transport system to access the disruption; but less attention is given to the potential impacts of weather extremes on the performance of transportation network. In response to that, this study aims to provide a framework to assess the vulnerability of urban road network due to floods. An integrated framework linking meteorological information, land use functions, and hydrodynamic model with safety speed function is used to relate flood depth to reduction in speed in order to determine road network vulnerability. Two rainfall events with 1-in-10 year and 1-in-100 year return period were simulated for inundation mapping over road network and spatial vulnerability of road network was assessed.

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.