Building Urban Climate Change Resilience in Saharsa City, Bihar

Why Urban Climate Change Resilience (UCCR)

Most of the Indian cities are confronting challenges of resource scarcity, ageing and/or inadequate infrastructure, and poor quality of critical basic services. The situation is further aggravated by the fact that installing new infrastructure has become nearly impossible due to very high densities and lack of space. Major changes in density and decongestion of core urban areas to improve services are politically unpopular and administratively challenging. Only in rare cases are Urban Local Bodies able to decongest and improve the services in core areas. This problem of development deficit is compounded further by additional stress from climate change on urban infrastructure and critical basic services consequently producing a large-scale multiplier effect on the rapidly burgeoning urban population.

Project Partners

- Lead: Gorakhpur Environmental Action Group (GEAG)
- Collaborating partners: Institute for Social and Environmental Transition International-(ISET) and SEEDS India
- City Partner: NavJagriti, Bihar

Project period: 2012-2015

City location : Saharsa

City Population: 1,56,540 (Census 2011)

No of wards : 40

Density : 7408 persons/km²

Administration : MunicipalityAnnual rainfall : 1385.4 mm

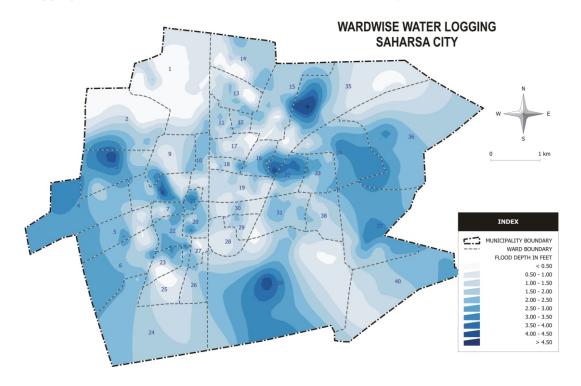


UCCR Coordination

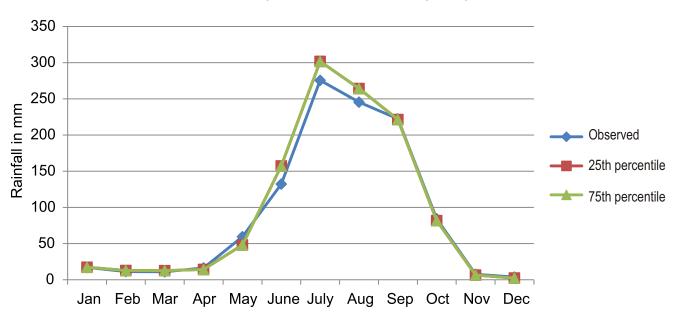
Gorakhpur Environmental Action Group (GEAG) is a partner in Asian Cities Climate Change Resilience Network (ACCCRN) India program. The ACCCRN- India program began in 2008 (Phase I: City scoping and selection). Three cities in India Gorakhpur, Indore and Surat were identified for engagement and assessment in Phase II (City level engagement and capacity building, development of City Resilience Strategy, 2009-2010). During this phase, TARU steered the program in Indore and Surat and GEAG in Gorakhpur. Phase III looked into implementation of urban resilience strategies and implemented interventions identified in the urban climate resilience strategy and action plan, 2011- 2014. Phase IV (2015-2016) is focussing on replication and scaling up of UCCR actions in India. In this phase GEAG is replicating its experiences of phase II and III in three cities namely, Basirhat (W.B), Saharsa (Bihar) and Jorhat (Assam) of eastern India.

The City Saharsa (Brief Profile of Saharsa City)

- Saharsa is a city and a municipality in the Saharsa district of Bihar in the north of the country, east of the Kosi River. it has potential to be developed as a logistic hub and food park
- The area of town is 21.13sq.km with a population of 156540 as per 2011 census;
- Saharsa ranks eighteenth in terms of urbanization in the state with the rate of urbanization being 8.3%.
- The average annual rainfall is about 1385.4 mm and average temperature varies from maximum of 43°C in May to a minimum temperature of 3°C in January;
- The city is vulnerable to climate change impact like flood, intermittent drought, fire, lightening and poor quality of drinking water
- Sluggish infrastructure development coupled with rapid urban population has declined the quality of urban life
- Lack of drainage system and poor solid waste management has increased the incidence of water logging for more than one month in some parts of the city



Saharsa Projected Precipitation (2040)



Source : • http://cmip-pcmdi.llnl.gov/cmip5/ •India water portal

Key vulnerabilities of the city

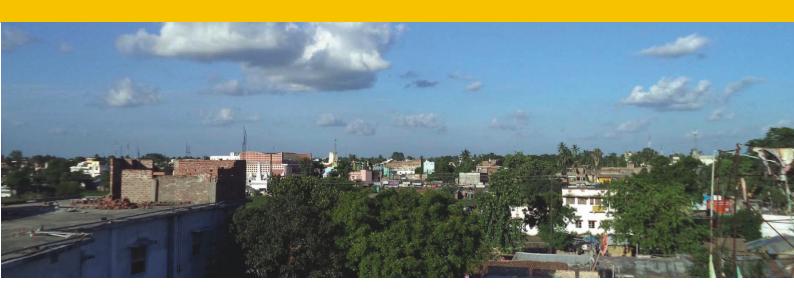
- The city is totally devoid of drainage system. There is no system for wastewater management. Only six percent of the city areas have road side drainage.
- Water logging and drainage congestion is a serious problem in the town. The situation of central parts of the city is more pathetic in comparison to the outer wards
- The prolonged water logging, unhygienic and filthy surroundings have made the city more prone to water and vector borne disease like Diarrhea, Kala Aztar, skin related diseases and Malaria
- Still 22% Urban household practice open defecation
- More than 90 percent household of the city are consuming drinking water from shallow Hand pump which is fully contaminated.
- Poor solid water management
- Haphazard land use practices

Project Output

- Better understanding of City's Vulnerability
- The City Resilience Strategy developed (detailing actions for short, medium and long term)

Objective of the Project

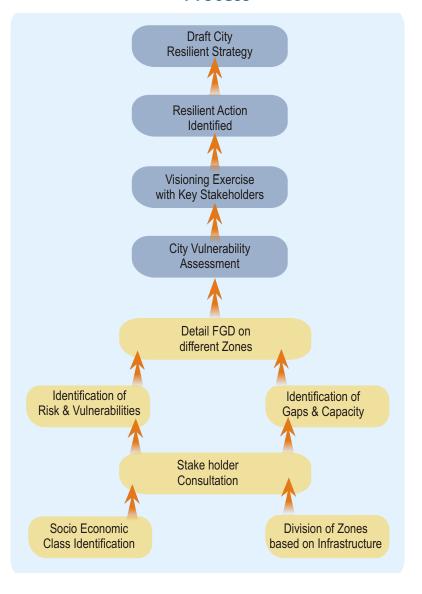
To enhance the capacity of the cities to develop Climate Resilience Strategy and undertake advocacy on UCCR issues at state, national and international levels for replication and scaling up of the ACCCRN process.



Expected Impacts

- The project will benefit the populace of the city especially the poor and vulnerable and enhance understanding of vulnerability issues and Climate Resilience;
- Urban planners and Municipalities, will benefit through enhanced capacity to promote Climate Resilience with the aid of practical tools and methodologies made available to them; and,
- Programmes, policy makers and practitioners at the State and National level will benefit from dissemination of tools and methodologies, and cross learning on implementation experience of this project.

Process













Technical Support:

