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SURAT CLIMATE RESILIENCE STRATEGY

Project Highlights

- Development of an early warning system for floods
- The system is an end-to-end early warning system which has been instrumental in reducing flood risks of the city
- Integrated strategy based on the expertise of multiple stakeholders from all walks of urban development
- Minimization of economic losses in the city attributable to floods

Background

Surat, one of India's most economically successful city is extensively prone to floods leading to the constant threat for the city. The geographical location of the city, i.e., on the Tapi river makes it flood prone not only from heavy precipitation in and around the city but also from heavy precipitation upstream and from high tides downstream. In order to minimize the risks of disaster and make the city resilient to the shocks of disasters, the city took an initiative of developing early warning systems and bring together expertise from all walks of urban sector to demonstrate how this strategy can help in not impeding growth of the city.

Surat,
Gujarat

2009-2010

(Not to scale)

Project Objectives

I. Development of an integrated climate resilience strategy for Surat to make the city resilient to the impacts of natural calamities, especially floods

Key Stakeholders

Surat Municipal Corporation with technical support from TARU Leading Edge, a research and consultancy company working on disaster management and climate change

Approach of Climate Resilience Strategy

The strategy was planned with an aim to minimize the impacts of floods on the city and make the city resilient to the disaster. The strategy was developed under the Phase II of the Asian Cities Climate Change Resilience Network (ACCCRN) initiative. A city advisory committee including stakeholders from all sections of urban life- including academia, industry, local government and civil society etc. was established to study the impacts of climate change on the city. The thorough understanding gained by the committee was used to create a Surat Climate Change Trust. This trust is a unique instrument designed to develop a resilience strategy for the city.

- An "End-to-End Early Warning System" was setup to reduce the intensity of flood damage
- Extensive public awareness campaigns and sensitization was done to increase the level of understanding the impacts of flood warning systems
- A large number of risk resilient workshops were conducted with the key stakeholders to develop the strategy for the city

Financial Structure of the initiative

The strategy was funded by the Rockefeller foundation under Phase II of the Asian Cities Climate Change Resilience Network (ACCCRN) initiative

Achievements

- Surat has been able to ensure sustainable economic growth in the city in the face of the ecological challenges
- Since its inception the system has saved the city from any intensive impact of floods due to its timely warning system
- Sensitization of the local public about the importance of these warning systems
- Creation of the "Urban Health and Climate Resilience Centre" in the city which primarily works on urban health and building climate change resilience
- One of the major achievements of the initiative was the inclusion of a budget line specifically for climate change in the Surat Municipality budget for the year 2013-2014

Success Factors

- Strong and stable leadership the Surat Municipal Corporation
- Technological Innovations to establish an "End-to-End alarming system"
- Commitment and support of the local bodies
- Intensive campaigning and mass involvement for the drive

Limitations

Presence of large number, i.e. ~60% of migrant population in the city making it difficult to spread awareness about the key challenges associated with floods

Source: https://smartnet.niua.org/sites/default/files/resources/Urban%20Green%20Growth%20Strategies%20For%20Indian%20Cities%20Vol.3.pdf

For more Information

2. http://www.asiapacificadapt.net/sites/default/files/resource/attach/Surat_City%20Resilience%20Strategy_TARU-SMC.pdf
3. http://www.100resilientcities.org/strategies/surat/