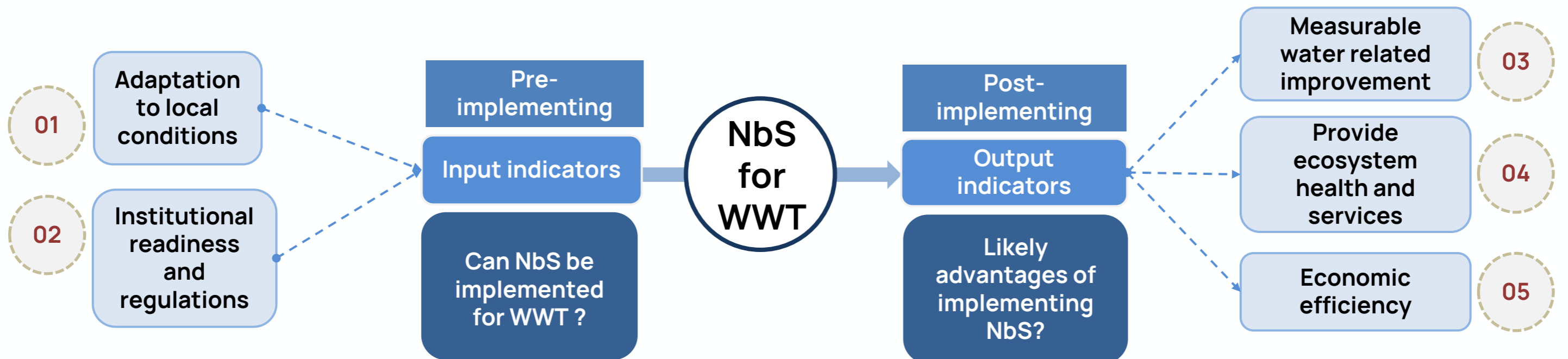


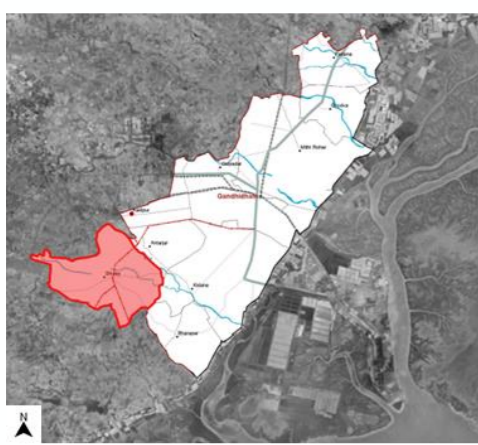
India's rapid urbanization has intensified the need for alternatives to energy-intensive and costly conventional wastewater treatment (WWT) facilities. This research explores Nature-based Solutions (NbS) for eco-centric treatment methods and seeks to develop a **comprehensive framework to inform decisions on adopting NbS in WWT.**



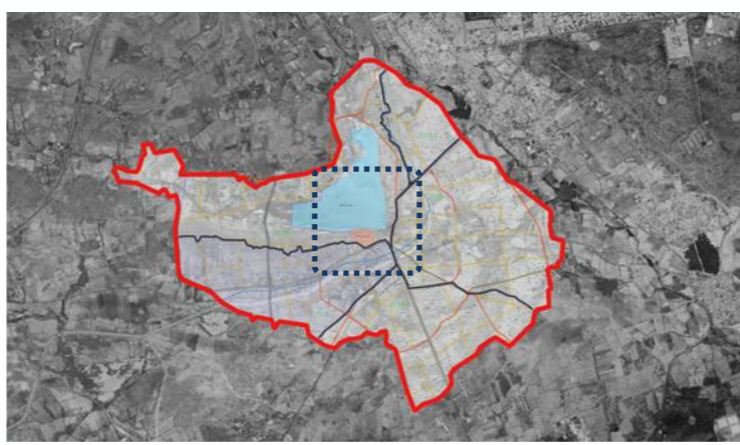
Source: Author

### Two-part Framework

- **Input (pre-implementation) indicators** help determine if NbS for WWT can be adopted or not.
- **Output (post-implementation) indicators** suggest possible advantages.
- Each indicator has sub-indicators. A set of questions, based on the sub-indicators has been developed, **for local authorities.** This questionnaire is adaptable.



Gandhidham Taluka, Kachchh



Shinay, Gandhidham



Source: Field visit, FGDs, Interviews

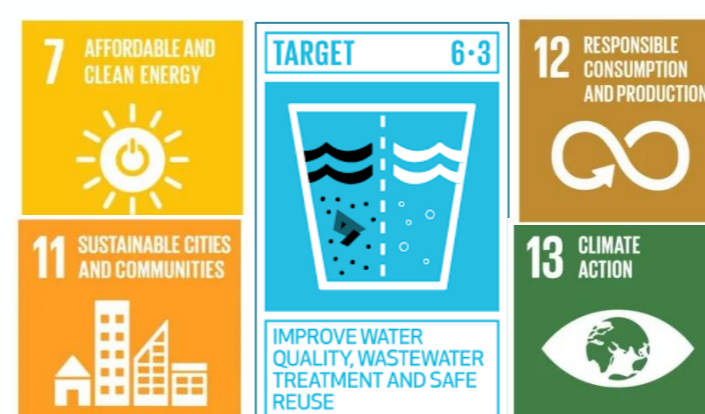
**40** questions for all indicators

**10** questions shortlisted aligning with input indicators

**Why Shinay?** This case site, in water-stressed Kachchh district, was chosen because the **community is endeavoring to establish a WWT facility.**

Based on our questionnaire, input indicators suggest that **NbS for WWT facility can be adopted in Shinay.**

Outcomes lay the groundwork for **informed decision-making and effective implementation of NbS in wastewater treatment** across diverse Indian contexts.



SDG linkages of NbS for WWT



SCAN FOR MORE

#### Social

- Community participation
- Foster a sense of ownership and empowerment.

#### Economic

Potential cost savings of up to 50% in capital and operational costs

#### Environmental

Promising path towards more environment friendly wastewater management.



CEPT UNIVERSITY

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