



INTEGRATED URBAN SANITATION DECISION SUPPORT TOOL

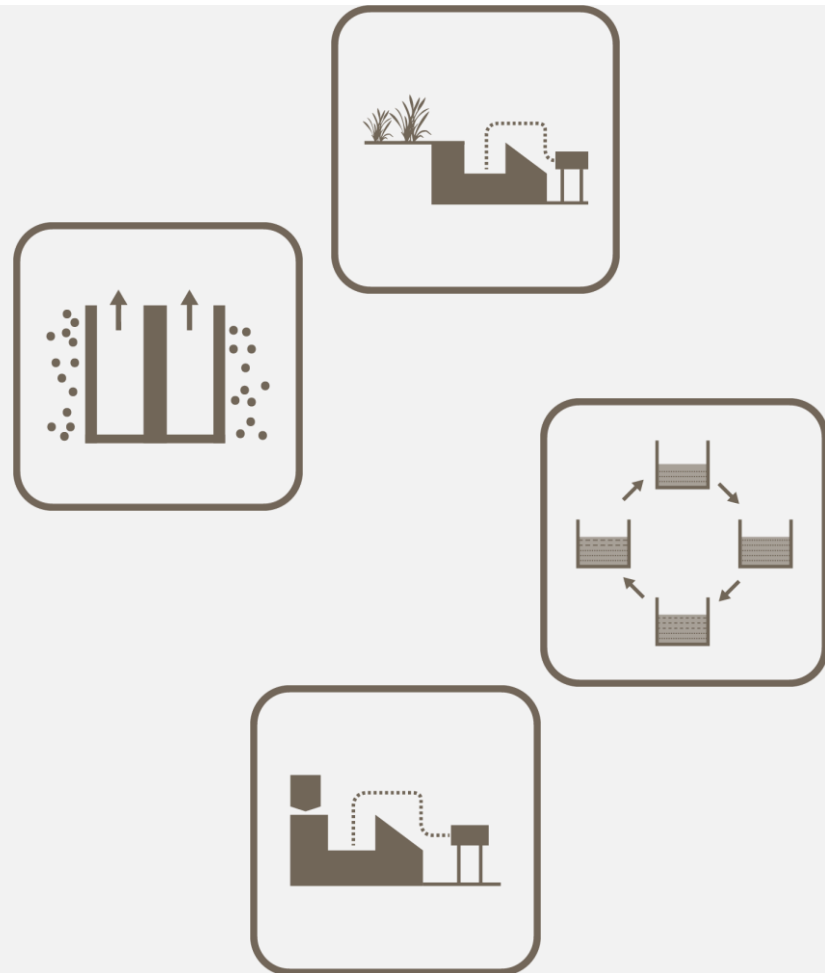
Start

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Sanitech

- ▶ **Need:** What aims does this tool satisfy
- ▶ **Context:** Where does this tool fit in
- ▶ **Capabilities:** What are the features of the tool
- ▶ **Learnings:** What we learnt from Field testing
- ▶ **Way Forward:** What we envision for the tool



Resources Review

Type of Resources	Number	Topics covered/aspects	For whom
Benchmarks	3	Awareness of benchmarking, Service Level Benchmarks for wastewater, sanitation, municipal solid waste, storm and drainage and water supply	For planners and decision makers
Guidebooks/ Manuals	30	Maintenance, Community Led Total Sanitation, ECOSAN, Technology overviews, Design Construction and operation, City Sanitation Planning, Financing, Pollution	For planners and decision makers
Case studies	12	Decentralised treatment, Reuse, ECOSAN, Toilets/storage, treatment, onsite, financing	For planners, designers, engineers, NGOs.
Evaluation Tools	32	Sewerage modelling/planning, capacity building/training, financing, data collection/scheduling/monitoring, transport, decision-support tools	For planners, engineers, service delivery management

In 2013, CSTEP evaluated existing support resources for decision makers.

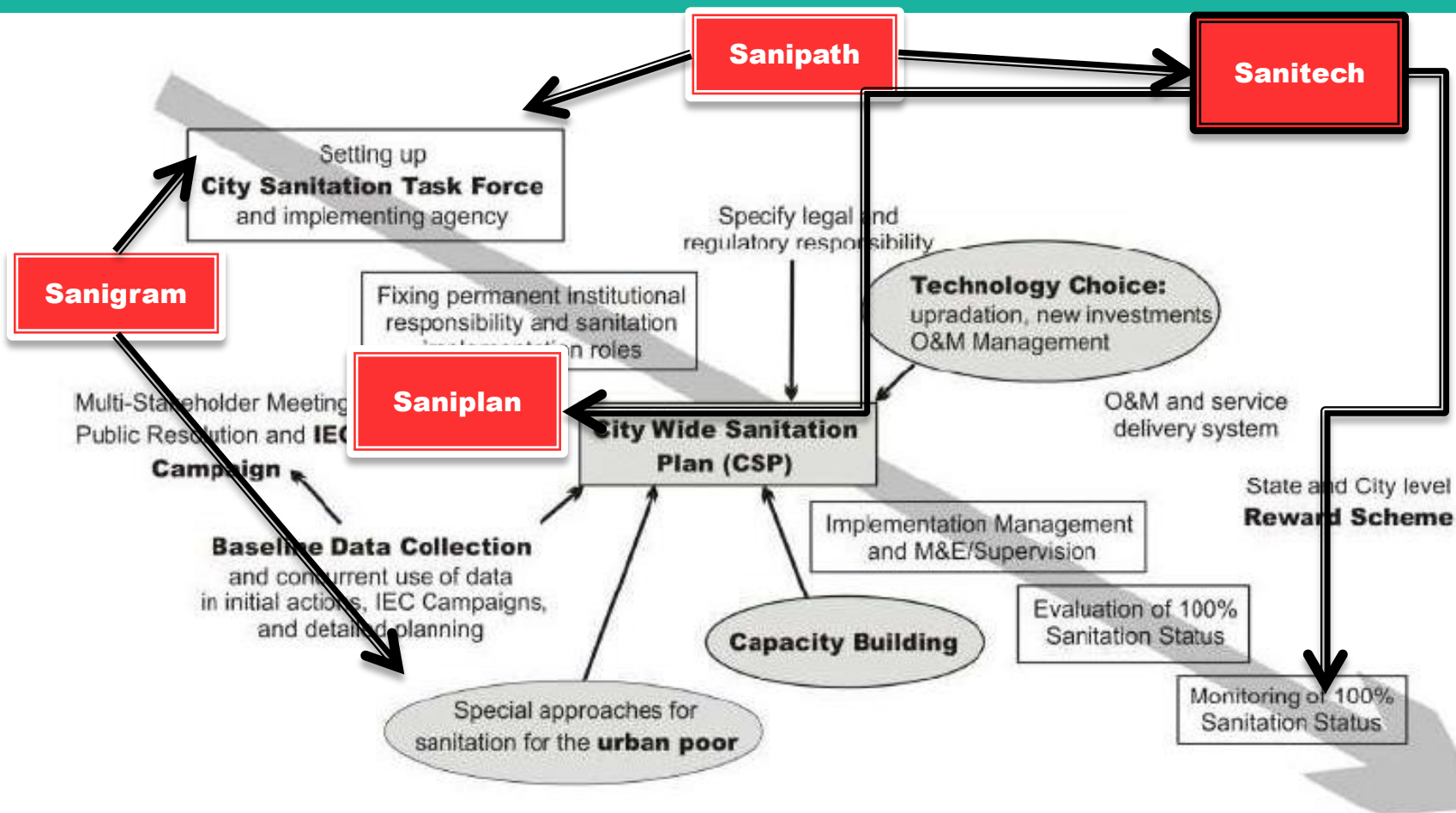
The results of this study defined the objectives for sanitech

OBJECTIVES

- ▶ Develop a decision support framework
- ▶ Comparison of options
- ▶ Framework for analysis, visualisation, and self-learning
 - Creation of scenarios
 - Regular updation of technology data and city data

Think Systems, think options

As a part of NUSP



(Source: National Urban Sanitation Policy MoUD 2008)

IEC= information, education, communication

SANIGRAM (SFD) – Summarizing the sanitation situation (city level) for awareness raising and kick starting communication

SANIPLAN – A Sanitation Planning Tool – how you are doing, performance, and financing options

SANTOOL- Decision Support for Sanitation Systems choice, looking at options, scenarios and identifying trade-offs

SANIPATH – Exposure risk assessment tool

As a part of FSM Toolbox



About the tool

- ▶ GIS enabled user interactive interface
- ▶ Allow assessment of various technology options
- ▶ Compare a portfolio of technology choices
- ▶ Facilitate collaboration and consultation

Version 2: Capabilities

- ▶ Repository of complete systems, with all parts of the sanitation value chain, including FSM
- ▶ GIS-based ward/city information
- ▶ Accessible system-based information
- ▶ Ability to add cities/systems into the repository
- ▶ Filtration of systems based on constraints

Version 2: Capabilities

- ▶ Identify suitable systems for the city/ward/area
- ▶ Perform “interventions”
- ▶ Create and save “scenarios” with a set of “interventions”
- ▶ Compare scenarios
- ▶ Calculation of cost (CAPEX, OPEX), resource requirements for scenarios and reuse potential
- ▶ Exporting scenario information for use in SaniPlan

Results From Field Testing

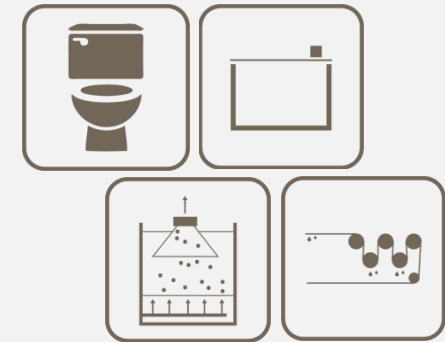
- ▶ Testing and Validation Workshop, Bangkok, January 2016

- ▶ Field testing in Dhenkenal and Angul (Odisha)
 - Served as a sensitization course for system-based approach to sanitation
 - Identified plausible solutions for small cities
 - Could be used to project Capex and Opex for other similar sized cities and other cities

- ▶ Could assist in state allocation of funds for sanitation systems

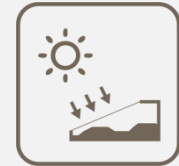
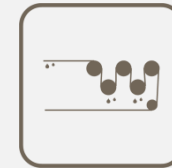
Way Forward

- ▶ Allow users to design sanitation systems
- ▶ Develop indicators
 - Environmental, Social, Health & Safety or other aspects.
- ▶ Link other sanitation tools – expand interaction with FSM Saniplan



Way Forward

- ▶ Testing in cities in Odisha, Tamil Nadu and Karnataka
- ▶ CSTEP to disseminate the FSM tool box in India
 - Training of Trainers (ToT)
 - Capacity building for cities through handholding



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www.cstep.in

SANITECH

<http://darpan.cstep.in/sanitation/>

Username: **demo_user@demo.in**

Password: **demo@123**

Thank You

