CSIR-CMERI MECHANIZED SCAVENGING SYSTEM- A FILIP TO THE SWACHCHA BHARAT ABHIYAN

Relevant for: Science & Technology | Topic: Science and Technology- developments and their applications and effects in everyday life

CSIR-CMERI is developing a Mechanized Scavenging System, which was initiated after intensive studies of the diverse nature of Indian Sewerage Systems and the manner of its chokages. The technology is Modular in design so as to ensure customised deployment strategies as per situational requirements. The System also focuses upon Sustainable Usage of resource i.e. Water as the System sucks in Slurry Water from the choked Sewerage Systems and after adequate filtration of the same redirects the same for Clearing of Chokages using Self-Propelling Nozzle. This, CSIR-CMERI technology provides in-situ option for Mechanized Scavenging as well as purification of Water. The design of the Technology is such that the Water Filtration Mechanism may be changed/modified as per the customised needs/requirements with the ability to change/redesign the Filter Media. The Vehicle-mounted Filtration Units will be able to augment and use Water from Surface Drain and Flooded Areas and purify it into Water suitable for Agricultural, Household and Drinking Water usages.

The Drinking Water Scarcity prevalent in Flood-Affected regions can be solved to a certain by providing instantaneous and in-situ Water Purification solutions at ease. This provides a consolidated Technology Solution in a Flood-Affected region as it will be able to clear Drainage Chokages in flood-affected regions, which will help in providing an outlet for flood stagnated Water, as well as provide Water Purification solutions in Flood Disaster Zones.

Since, Situational Understanding is continuous process and requires thorough Studying throughout. This continuous Studying and Analysing Process also translated into incremental improvisation of the Technology at CSIR-CMERI. After, the development of the first Prototype, Subsequent Prototypes were developed to improve the versatility and robustness of the Technology. This Incremental Innovation approach was coupled with deployment of the Prototypes at various places with diverse situational challenges.

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