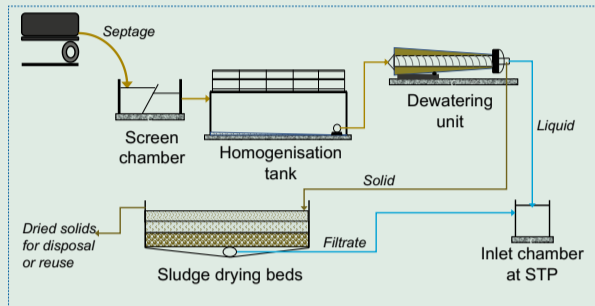


CITY IN FOCUS



Proposed line flow diagram for co-treatment facility suggested by NIUA at Kargi Chowk STP



Current practice of direct discharge of FSS at inlet pumping station at Kargi Chowk STP

DEHRADUN

PROJECT	Co-treatment facility at Kargi Chowk STP
TYPE	Faecal sludge and septage management
Contact person:	Mr. Shantanu Kumar Padhi, Senior Technical Officer – SCBP project, NIUA

Overview of Septage Management

- 34% of sewerage network spread across 6 zones
- Desludging frequency 5 - 8 years
- Average cost of desludging for a household ₹ 3000
- On-site sanitation (OSS) systems mainly comprising of septic tanks
- Capacity of desludging vehicles 4000 to 6000 litres
- Wastewater treatment through 7 STPs (Total capacity: 150 MLD; 34% utilization)

Dehradun is an expanding town, the state capital of Uttarakhand. There are 8 STPs existing in the town. Yet, it is estimated that a significant proportion of households are dependent on septic tanks based sanitation systems that require emptying of tanks on a regular basis.

A viable solution to address the sanitation requirements of the population is to combine the seweraged and non-sewered sanitation systems in Uttarakhand, which is predominantly a hilly state. The handling of faecal sludge and septage (FSS) generated from non-sewered sanitation systems such as septic tanks require a dedicated treatment plant. However, this is found to be a capital intensive activity and requires large land area. For a densely populated city like Dehradun, a middle ground has been realized by co-treating the FSS with sewage in the existing sewage treatment plants (STPs).

The STP at Kargi Chowk in Dehradun was commissioned in 2013 and has a treatment potential of 68 MLD. However, the utilization of this STP was only 30% due to difficulties in laying down of sewerage network. At the same time, the waste from OSS systems needs to be treated safely. By transporting the sanitary waste from OSS systems to Kargi Chowk STP, two major benefits will be realized: (i) reduction in the environmental pollution by limiting the discharge of faecal sludge and septage into 'nallahs' or open drains, and (ii) increasing the utilisation of the Kargi Chowk STP which will lead to improvement in its overall performance.

* Views are expressed in consultation with city officials during field visit

KNOWLEDGE HUB

Latest C-Cube Blog

In the C-Cube Blog, Ms Prerna V. Mehta, Lead Urban Development, WRI (India) and Abhishek Behera, Consultant Sustainable Cities and Transport, WRI (India) writes about Alternative Mobility- A must have for Indian Cities. Read blog [here](https://linktr.ee/ccube)

EVENT

WORLD SUSTAINABLE DEVELOPMENT SUMMIT 2021

REDEFINING OUR COMMON FUTURE: SAFE AND SECURE ENVIRONMENT FOR ALL

February 10-12, 2021

C-Cube Participates in World Sustainable Development Summit 2021

Dr. Umamaheshwaran Rajasekar, Head, Climate Centre for Cities was invited as a panelist for the session on Urban Resilience: Participative Governance, Design and Development at the World Sustainable Development Summit 2021, Redefining our common future: safe and secure environment for all. The summit is the annual flagship event of The Energy and Resources Institute (TERI) from 10th-12th February 2021.

CONGRATULATIONS!

Anshul Abbasi from the Climate Centre for Cities started an initiative called Blankets and Woolens with his alma matter Jamia Millia Islamia. This initiative has been running for 7 years and now they cover Delhi, Lucknow, Kanpur, Bareilly and Noida. They distribute blankets, woollens, masks and sanitisers to the underprivileged. The team was successful in distributing 430 blankets and 10 boxes full of woollens. You can follow the initiative on Instagram ([@blanketsandwoollens](https://www.instagram.com/blanketsandwoollens))



Anshul Abbasi, Fellow India Smart cities Fellowship (2019-21)

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