

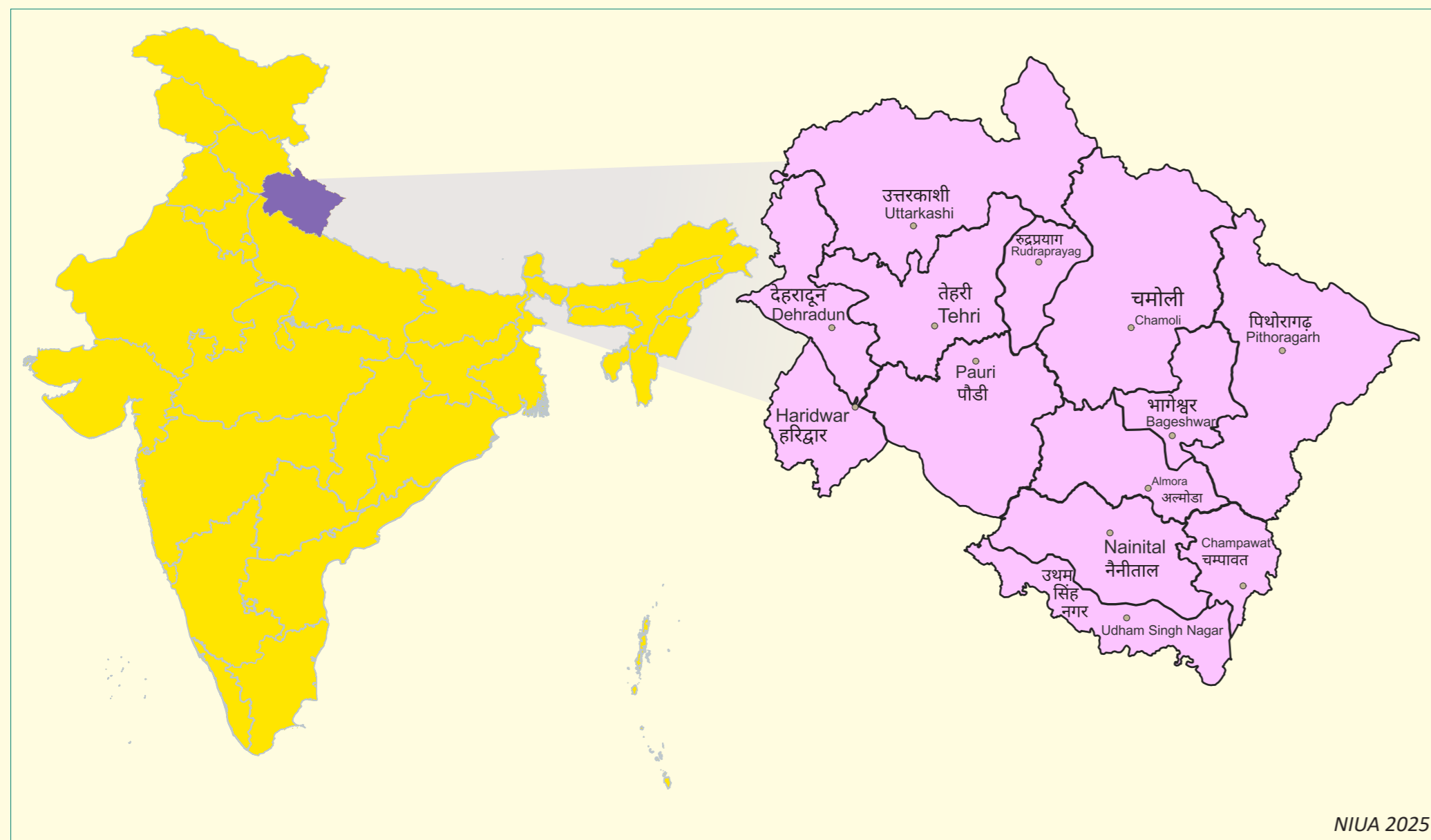
Desludging fee calculator for the State of Uttarakhand

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Background

The sanitation vertical of the National Institute of Urban Affairs (NIUA) is driving the Uttarakhand state government to mainstream Faecal Sludge and Septage Management (FSSM) and Integrated Usedwater and Septage Management (IUSM) by supporting in operationalising the State Septage Management Protocol, 2017 across all the Urban Local Bodies (ULBs) in Uttarakhand. With regard to this, a model septage byelaws formulated by NIUA in adherence to the State Septage protocol mandated the registration of all private players supporting desludging services within the administrative boundary. These byelaws also standardized user charges for different categories based on the type of establishment, thereby strengthening equitable services to the households and at the same moment, bringing transparency for emptying services thus benefiting both emptiers and households. One of the challenges has been observed that not all private emptiers adhere to the fee fixed by the ULBs, the demanding nature and scope of work coupled with the limited competition among emptiers often results in users being subjected to exorbitant desludging charges.



In many cases, the charges set by ULBs have limited scientific calculations involved, resulting in septage bye-laws taking a one-size-fits-all approach, which provided a uniform rationale across ULBs with varied terrains and haulage distances. A more equitable, context-specific, and scientifically grounded desludging fee structure was crucial to ensure affordability for users while maintaining compliance among desludging operators. In Uttarakhand's hilly regions, where urban local body (ULB) contexts vary drastically within a few kilometers, safely managing septage is challenging due to high user charges.

Over the past six years, the National Institute of Urban Affairs (NIUA) has worked with the Urban Development Directorate to formalize the state's FSSM protocol, which resulted in 71 out of 105 ULBs notifying their septage byelaws since 2017. To address this challenge of desludging fees, NIUA began developing a desludging fee calculator in 2022, this tool uses data on faecal sludge management, factoring in haulage distance, terrain, and freight weight, to create a fair, transparent pricing system informed by expert's cross learning.

Objective

To harness the existing data on Faecal sludge and septage management (FSSM) available with the ULBs, which helps them to iterate the desludging fee for different hauling distances.

Standardised service charges to reduce the chances of illegal dumping of faecal sludge into open spaces. Increase the demand-based desludging, as the user charges will be transparent and justifiable against the service delivery, and more users will be liable to empty the containments from the ULB.

Rationalising the emptying fee by scientific calculation and fixing the charges for a period under the FSSM Bye-laws being developed by the ULBs

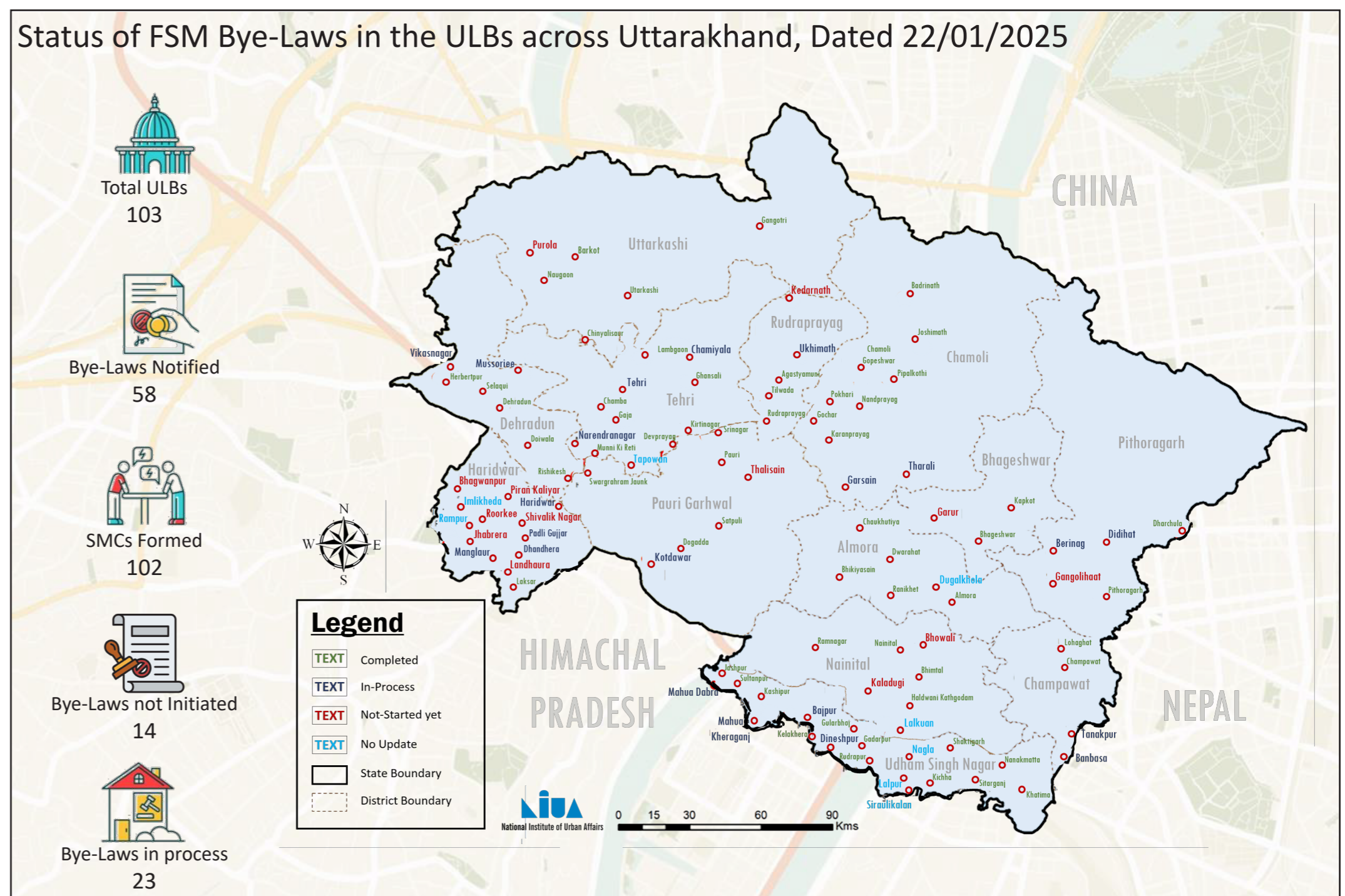
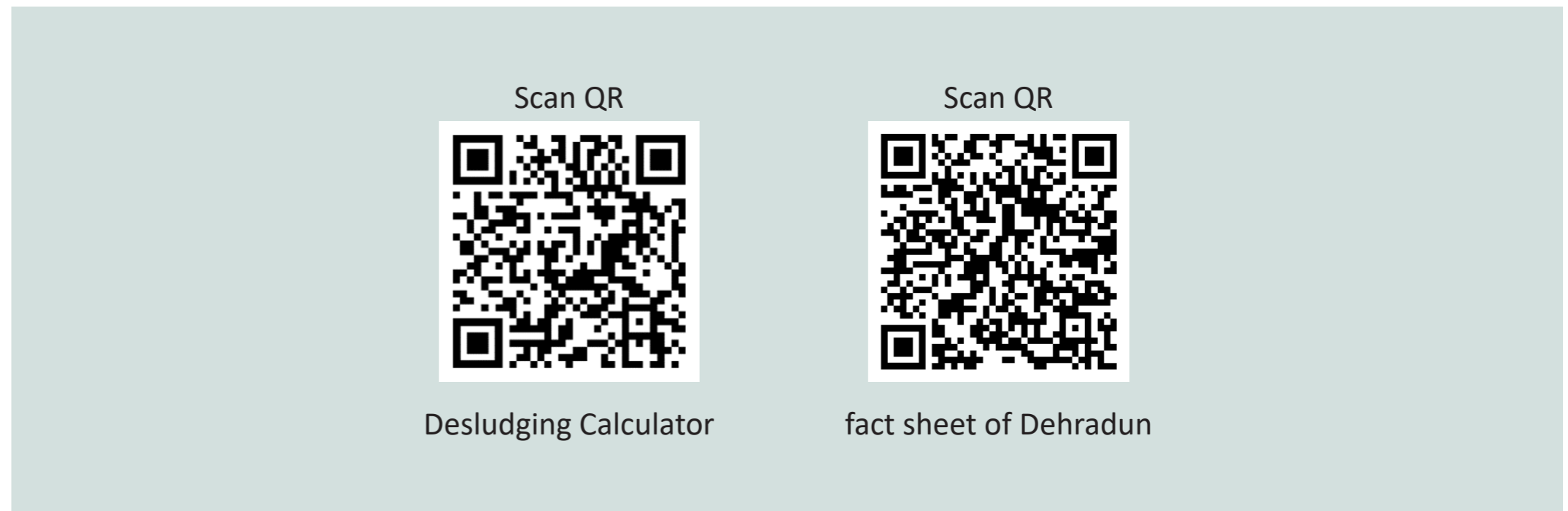
Methodology

An excel based tool converted into a web-based application that used a few selected ULBs to validate the desludging fees. The tool's introduction aims to standardize and fix user charges in the existing FSSM Bye-laws of the ULBs.

DESLUDGING FEE CALCULATOR



To enhance desludging services in the State of Uttarakhand, NIUA developed a standardized tool for calculating desludging fees, addressing irregularities in demand-based pricing and escalating service costs.



Outcome

In the long run, the desludging fee calculator aims to support ULBs still developing their septage byelaws by providing a clear rationale for desludging charges. Since these charges were formulated based on the recommendation of Septage Management Cell (SMCs) recommendation, the process will become more linear with the usage of the tool which will regulate reduce conflicts among different stakeholders. At a national level, where such .

Status of FSSM Byelaws Notification In Uttarakhand

- Completed
- In-process
- Not-started yet
- No Update

