

# Straight flush. Blue river, green fields

## Support to Ganga Rejuvenation



**Commissioned by:** German Federal Ministry for Economic Cooperation and Development (BMZ)



**Co-financed by:** European Union (EU)



**Project partner:** Ministry of Jal Shakti, Govt. of India



**Project timeline:** March 2024 – February 2027



**Budget:** EUR 8.5 million



**Locations:** Jharkhand, Bihar, West Bengal, Manipur, Meghalaya, Tripura, Nagaland, Mizoram

**SDGs addressed:**







“We were using urea and other chemicals as fertiliser, but we could not shake the guilt of these having harmful effects like diabetes and heart disease. They were not just tough on the pocket, they were also hard on the conscience. Then, the sludge came.”

Pawan Kumar has been using an unusual fertiliser for his fields for the last five years.

“About five years ago, the farmers in Haridwar were struggling. The soil was tired, the yield was weak,” says Pawan. “We were using urea and other chemicals as fertiliser, but we couldn’t shake the guilt of these having harmful effects like diabetes and heart disease. They weren’t just tough on the pocket, they were also hard on the conscience. Then, the sludge came.”

The nutrient-rich sludge that Pawan now uses as fertiliser is the end product from sewage treatment plants (STPs). Treated and repurposed as organic manure, this sludge is being provided free to farmers as part of the Indo-German cooperation project ‘Support to Ganga Rejuvenation’ to help keep pollution out of the Ganges. The project’s focus on sludge-management has turned a liability into an asset for farmers like Pawan.



“When we were first told about the sludge, most of us were apprehensive. We didn’t think it would work and we certainly didn’t think it would be healthy. After all, consider the source,” says Pawan. “But we were asked to try it over just a few small units of land and test it out. When we did, we were surprised to find how well the crops took it.”

“The wheat was flourishing and the soil was well nourished. The sludge is a companion to friendly organisms like earthworms, but an enemy to pests. It is the perfect amalgam of fertiliser and pesticide,” stated Pawan Kumar.

Meanwhile farmers in Haridwar reap the benefits of sludge generated by STPs, higher up in the mountains at Rishikesh, technology is changing the way STPs are monitored.

**“Before Ganga Tarang, we had to rely on physical checks,” explains Rohit Jayara, Monitoring and Evaluation Specialist, Uttarakhand Jal Sansthan. “With difficult terrain, and landslides during inclement weather causing roads to become inaccessible, monitoring STPs and responding immediately would be next to impossible. But through the Ganga Tarang portal, a remote monitoring tool, we can measure water quality parameters at all STPs in Uttarakhand round the clock and access this information from anywhere. In this manner, we are able to track issues and act immediately, preventing any untreated waste from entering the Ganga.”**







Perhaps the most notable success of the project was the establishment of a sustainable septage management system in Rishikesh, with the State Mission for Clean Ganga (SMCG), the Urban Development Department (UDD), Rishikesh Municipal Corporation and GIZ working together to regulate septage collection.

In 2019-2020, a detailed household survey and geo-spatial mapping of 10,000 homes was undertaken to create a comprehensive waste management plan. Data collected included the precise locations of existing septic tanks, sewage lines, and road widths, allowing for a systematic approach to waste collection and disposal.

“Septage collection was unregulated in the area just a few years ago,” says Rajnish Sethi, who runs a small sewage waste disposal service. “For a small fee, we would collect the waste from households and then proceed to dump it anywhere, even in the jungle or a stream. Now, things have changed for the better. Once we agreed to register ourselves with the Nagar Nigam, we were allowed to collect user charges, issue a receipt and then dispose of the septage in the designated receiving chamber with a direct outlet into the STP. There are no longer any disputes over where we release the septage. Residents are satisfied, waste collection is efficient, and the Ganges remains clean. And this is a win-win for everyone!”