Training and Awareness Campaign on Faecal Sludge Management

Conducted by

CSIR-North East Institute of Science and Technology, Jorhat, Assam-785006

Project Title: Development of Bioformulation for Faecal Sludge Treatment and Performance Evaluation through Pilot Scale Demonstration

Funded by

National Mission on Himalayan Studies (NMHS), Ministry of Environment, Forest & Climate Change (MoEF&CC), Government of India, New Delhi

Grant No: NMHS2024-25/SC-XIII/MG/SL-07

Program Report – 18 October 2025, Rupa, Arunachal Pradesh

A Training and Awareness Program on the Application of Indigenous Bioformulation was organized under the project titled "*Development of Bioformulation for Faecal Sludge Treatment and Performance Evaluation through Pilot-Scale Demonstration*," funded by the National Mission on Himalayan Studies (NMHS), MoEF&CC (Grant No: NMHS2024-25/SC-XIII/MG/SL-07). The program aimed to strengthen local capacity and promote sustainable sanitation practices in the Indian Himalayan Region. It was held on 18 October 2025 at Rupa, Arunachal Pradesh, with active participation from 26 localites, including sanitation workers, farmers, and waste management personnel.

The training primarily focused on the application and field implementation of the developed indigenous bioformulation for effective faecal sludge management. Participants were sensitized to the key characteristics and functional attributes of the bioformulation, such as its ability to accelerate organic matter degradation, control odor, work in cold conditions, and reduce pathogen load, thereby improving sludge stabilization and reuse potential. The session also emphasized the importance of adopting eco-friendly biotechnological solutions to address sanitation challenges in high-altitude and resource-limited areas.


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CSIR-NORTH EAST INSTITUTE OF SCIENCE AND TECHNOLOGY
JORHAT/ जोरहाट-785006, ASSAM/ असम
Ministry of Science and Technology, Govt. of India
Website : www.neist.res.in

Date: 11/10/2025

To,
Farmer-Producer Organisation,
West Kameng District, Arunachal Pradesh

Subject: Conduction of Training Program on *Faecal Sludge Waste Management* on 18th October 2025

Dear Sir,

This is to inform you that a training program on "Faecal Sludge Waste Management" will be conducted on 18th October 2025 at FPO, West Kameng District, Arunachal Pradesh, under the project titled "Development of Bioformulation for Faecal Sludge Treatment and Performance Evaluation through Pilot Scale Demonstration." The project is funded by the National Mission on Himalayan Studies (NMHS), Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India, New Delhi (Grant No: NMHS2024-25/SC-XIII/MG/SL-07)

The project aims to address the challenges of Faecal Sludge Management (FSM) in the Indian Himalayan Region (IHR) by developing a bioformulation comprising indigenous psychrophilic microbial strains that accelerate sludge degradation in Faecal Sludge Treatment Plants (FSTPs) and insulated pit systems while minimizing environmental impact.

The training program will include sessions on:

- Application and performance of bioformulation for FSM,
- Operational practices for local treatment systems, and
- Capacity building of local operators and entrepreneurs for sustainable waste management.

Your cooperation and participation in facilitating the training program at your premises will be highly appreciated.

With regards,

11/10/2025

Dr Sachin Rameshrao Geed, Project Investigator
Senior Scientist
CSIR-North East Institute of Science and Technology,
Jorhat, Assam 785006

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An Indigenous Bioformulation for Faecal Sludge Management

Project Title: Development of Bioformulation for Faecal Sludge Treatment and Performance Evaluation through Pilot Scale Demonstration

Funded by NMHS (MoEFCC)

Grant No : NMHS2024-25/SC-XIII/MG/SL-07

Project Leader: **Dr. Sachin Rameshrao Geed, Senior Scientist, CSIR-NEIST**

Team: **Dr. Jitendra Singh Verma (Senior Scientist), Dr. Ashutosh Namdeo (Principal Scientist)**, and **Er. Dhanjit Das (Senior Scientist), CSIR-NEIST**

Motivation of the Project

- Addressing **Faecal Sludge Management** challenges in the **Indian Himalayan Region**
- Development of a **bioformulation** composed of indigenous psychrophilic microbes
- **Acceleration of sludge degradation** in **Faecal Sludge Treatment Plants (FSTPs)**

Himalayan Woes

- Rugged terrain, Scattered houses, Sanitation problems
- Low temperature, Low sludge digestion
- Limited waste treatment facility

What makes this project different?

- Bioformulation-based FSM solution to the Himalayan region's unique needs
- Utilization of indigenous microbial consortia, including psychrophilic and psychrotolerant strains
- Promotes community resilience through region-specific solutions
- Implementation of bioformulation in FSTP(s)/insulated pit(s)

Goals and Benefits

- Reduced cleaning time
- Less odour
- Faster sludge breakdown in sub-zero temperatures
- Reduces sludge load
- Better sanitation in hilly areas
- Effective approach for sustainable FSM
- Skill development and training for IHR localities
- Cost Effective

Government of India Initiatives:

- **LiFE Mission** encourages everyone to adopt **eco-friendly lifestyles** and work together for a **sustainable environment**.
- **Swachh Bharat Mission (SBM)** focuses on **clean villages and towns**, improving **waste management** and **sanitation**.
- **Vibrant Villages Programme (VVP):** Developing border villages with better living, jobs, and facilities for sustainable growth.

Sustainable Development Goals (SDGs)

- In 2015, the UN adopted the 2030 Agenda for a better world.
- It includes 17 goals linking environment, society, and economy.
- SDG 6 focuses on clean water and sanitation for all.

CSIR – North East Institute of Science and Technology, Jorhat, Assam – 785006.
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