Minutes of Meeting

SEG expert meeting on approval of proposals under UBA SEG: Sanitation and Solid Waste Management

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Ministry of Education, Government of India

Organized by

SEG: Sanitation and Solid Waste Management

September 30, 2023

Mode: Virtual on Google Meet

The Subject Expert Group (SEG) for Sanitation and Solid Waste Management under the Unnat Bharat Abhiyan (UBA) organized an Expert Committee meeting on 30th September 2023, from 9:00 AM to 12:00 PM, using the Google Meet. The primary objective of this virtual meeting was to deliberate and evaluate project proposals falling within the domain of Sanitation and Solid Waste Management under the Unnat Bharat Abhiyan for further consideration and approval by the National Coordinating Institution (NCI).

In the lead-up to this meeting, our SEG meticulously reviewed a total of 221 project proposals. Subsequently, we communicated with each proposer through the online portal, conveying our observations and suggestions for refining their proposals. We identified certain aspects that demanded a more in-depth discussion during this process. It became evident that the responses on the portal did not consistently meet our standards in terms of comprehensiveness and detail.

Hence, the virtual meeting was convened to provide a platform for these detailed discussions. We extended invitations to the Principal Investigators (PIs) of 15 specific proposals to participate in an online interaction session. The primary objectives of this session were to address our specific remarks and, most importantly, to assess the potential shortlisting of proposals to be forwarded to NCI-IIT Delhi for further, more advanced scrutiny.

In our deliberations, we adopted well-defined criteria to guide the shortlisting process. These criteria included the PI's demonstrated on-ground research experience, the extent of knowledge contributed by the PI to the proposals, the feasibility of implementing the projects within the stipulated time frame while considering their potential impact on the population, and the sustainability of the projects beyond the designated project period.

After careful evaluation, the committee approved nine out of the 15 proposals. Seven are geared towards technology development, while the remaining two focus on technology customization. These selected proposals and the list of committee members who

participated in the meeting are detailed in the attached Table 2 and Table 1, respectively. This decision represents a significant milestone in our mission to advance Sanitation and Solid Waste Management under the Unnat Bharat Abhiyan.

Table 1 Experts and UBA staff present in the meeting

S. No.	Name	Role
1	**Prof. Indumathi M. Nambi**	Coordinator SEG - Sanitation and Solid Waste Management Unnat Bharat Abhiyan
2	**Prof. B.S Murthy**	RCI Coordinator IIT Madras Unnat Bharat Abhiyan
3	**Prof. Ligy Philip**	Professor, IIT Madras Expert committee member SEG - Sanitation and Solid waste management Unnat Bharat Abhiyan
3	**Dr. Mohana Krishnan Logan**	Assistant Professor, IIT Madras Expert committee member SEG - Sanitation and Solid waste management Unnat Bharat Abhiyan
4	**Ms. Hima Bindu Valleru**	Project Officer SEG - Sanitation and Solid Waste Management Unnat Bharat Abhiyan
5	**Ms. Sudha**	Project Officer RCI, IIT Madras Unnat Bharat Abhiyan

Table 2 List of selected proposals by SEG – Sanitation and Solid waste management and recommendations/ comments

S.No	Proposal Title	Proposal Id	Institute Name	Project Categories	Fund Requested (INR)
1	Long-lasting Dhoop battis/ Insects repellent from Organic Solid Waste for Sustainable Income Generation	C-41614/MH/PUN/SSWM/50K/1	Jaywant Shikshan Prasarak Mandal`S Rajshree Shahu College of Engineering, S.No.80, Pune Bombay Bypass Highway, Thathwade, Pune 411 033(AISHE Code:-C-41614)	Technology Customization	50000
Comments/ Suggestions: PI has visited the village, collected samples, and did some trail mixtures. Testing their products and getting their certifications as they move forward is recommended. They have identified some regional herbs for the admixtures and mentioned that villagers are interested in taking it up as an enterprise.					
2	Pipe Composting	C-41177/TN/KNY/SSWM/50K/1	Holy Cross College, Nagercoil-629 004. (AISHE Code:-C-41177)	Technology Customization	50000
Comments/ Suggestions: It was proposed to put up pipe composters in the households of SHG women to start with, in the adopted coastal villages. We also suggested collaborating with a recycling vendor to the panchayat to manage the plastics.					
3	Internet of Things Based solid waste management	U-0474/TN/KCP/SSWM/1LAKH/4	Sathyabama Institute of Science and Technology, Chennai(AISHE Code:-U-0474)	Technology Development	100000
Comments/ Suggestions: They wanted to put up composting pits with turners to automate composting and put sensors in dustbins to notify of overflowing. Suggested that the latter part can be ignored as SBM aims at door-to-door collection. The household waste generated in the village is around 50-60 kg. They mentioned that they would be able to fetch more funds from college.					
4	Production of mosquito repellent fragrance incense sticks from floral solid waste to health and wealth Eco-friendly product to development of Industrialization and Entrepreneurship	C-35810/TN/TRC/SSWM/1LAKH/1	Srimad andavan Arts and Science College, Thiruvanaikoil, Tiruchirappalli-620 005. (AISHE Code:-C-35810)	Technology Development	100000
Comments/ Suggestions: PI has proposed to mitigate floral waste from Srirangam temple in their adopted village, one of the prominent temples from TN - implementation of this project can have a significant impact. Have identified and performed trials on extracting oil from herbs with insect-repellent properties. This project is put forth based on the request for SHG to help them earn an extra income during winters when they cannot take up their conventional farming— suggested applying for a provisional patent, too.					
5	Orgalizer-converting waste to manure	C-1273/KA/MYS/SSWM/1LAKH/1	Vidya Vardhaka College of Engineering, Mysore(AISHE Code:-C-1273)	Technology Development	100000
Comments/ Suggestions: They have proposed to carry out vermicompost to improve the quality. It was suggested that they look into dry waste apart from managing the organic waste. Before getting started, it is recommended that they document the current waste generation and its management. Villagers have					

taken up mushroom cultivation but can only do it in summer. They have approached the college in the UBA interaction program to help them with an extra source of income around the year.					
6	Plastic Waste Management and Recycling	C-36929/TN/CMT/SSWM/1LAKH/1	Dr N.G.P.Institute of Technology(AISHE Code:-C-36929)	Technology Development	100000
Comments/ Suggestions: It is proposed to develop a web app to map vendor details and collection timings. It is the need of the hour, but the impact area is small. It is suggested to extend it to one block and then extend it to the whole state. Existing infrastructure and companies in this space focus more on the cities than the rural setting. If this can be successfully implemented, an entire database of a state can be created, and policies can be formulated for recyclable waste collection.					
7	Smart Plastic Waste Recycler	C-56586/MH/NGP/SSWM/1LAKH/1	Government College of Engineering(AISHE Code:-C-56586)	Technology Development	100000
Comments/ Suggestions: It is proposed to implement a centralized 10 kg plastic pyrolysis plant for three adopted villages. They have an emission control unit designed for the unit. Have suggested having enough safety measures to check on high pressure and temperature systems. They are yet to figure out a use case for pyrolysis oil. Have indicated that it can be used for collection vehicles only after appropriate testing.					
8	Development of low-cost organic manure from food waste for the welfare of the farmers through effective natural process	U-0458/TN/VIR/SSWM/1LAKH/1	Kalasalingam Academy of Research and Education(AISHE Code:-U-0458)	Technology Development	99000
Comments/ Suggestions: Developing a mechanical waste turner is proposed to enhance and ease composting. Suggested with a cycle kind of arrangement since hand churning with loaded waste is near to impossible, given the load. To check the feasibility of a hand churner, they are putting up a lab scale with their own cost. Including someone from the Mechanical engineering department is suggested to help and enhance the design.					
9	Fabrication of bio-digester for rural villages to convert organic and food waste into energy	U-0473/TN/KCP/SSWM/1LAKH/2	S.R.M.Institute of Science and Technology, Chennai(AISHE Code:-U-0473)	Technology Development	100000
Comments/ Suggestions: They have done laboratory trials to ensure the system's functioning and proposed to put up a small-scale plant that can cater to the needs of a community kitchen. They mentioned that the coordinator has access to some additional funds from the college.					
Total Fund (INR)					**7,99,000/-**

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