



## KISAN GOSHTHI REPORT PROFORMA

### 1. General Information

- Title of Kisan Goshthi : “Plastic Pollution in Soil: Impacts, Management and Public Awareness”
- Theme/Subject : National Mission for Sustainable Agriculture (NMSA)
- Session : 2025-26
- Date & Time : 17/04/2026
- Place of the Event : Kwaja ka purwa

### 2. Participants Profile

- Total Participants : 89      Total Farmers : 41      Women Farmers : 05
- Experts : 4      Students : 60

### 3. Objectives of the Kisan Goshthi

- To disseminate scientific knowledge on: sources, types, and impacts of plastic pollution in agricultural and terrestrial soils, including microplastic contamination and its effects on soil ecosystems.
- To create awareness about: the importance of maintaining soil health, minimizing plastic waste generation, adopting eco-friendly alternatives, and promoting sustainable waste management practices.
- To address issues related to: accumulation of plastic residues in soil, declining soil quality, adverse impacts on crop productivity and microbial activity, and lack of public awareness regarding plastic pollution and its long-term environmental consequences.

### 4. Programme Proceedings (Name & Proceedings in 120-150 words):

- **Subject Expert 1: Dr. Nitish Kumar** – He initiated the session by explaining the growing concern of plastic pollution in soil ecosystems and highlighted the major sources of macroplastics and microplastics in agricultural fields.
- **Subject Expert 2: Dr. Rahil Akhtar Usmani** – He discussed environmental policies, government initiatives, and waste management regulations aimed at reducing plastic pollution and promoting sustainable agricultural practices.
- **Subject Expert 3: Dr. Julius** – He elaborated on the scientific impacts of plastic contamination on soil fertility, microbial diversity, nutrient cycling, and crop productivity, emphasizing the risks associated with microplastics in the food chain.



- **Subject Expert 4: Dr. Riya Mehrotra** – She focused on practical management strategies such as recycling, biodegradable alternatives, residue management, public participation, and awareness campaigns for minimizing soil plastic pollution.

#### **Farmers' Interaction & Queries:**

- **Major issues raised** : Participants expressed concerns regarding excessive use of plastic mulch, improper disposal of agricultural plastics, accumulation of microplastics in soil, declining soil quality, and lack of awareness about sustainable plastic waste management practices.
- **Solutions suggested** : Experts recommended reducing single-use plastics, adopting biodegradable and eco-friendly alternatives, promoting recycling and proper waste disposal, encouraging organic farming practices, and conducting awareness programmes to minimize soil contamination and environmental risks.

#### **5. Technical Themes Covered :**

- Sources and types of plastic pollution in soil
- Microplastics and their environmental impacts
- Effects of plastic residues on soil health and crop productivity
- Plastic waste management and recycling strategies
- Sustainable and eco-friendly alternatives to conventional plastics
- Public awareness and environmental sustainability initiatives

#### **6. Practical Demonstration (if any) : NA**

#### **7. IEC Materials Distributed (Optional)**

- Type (pamphlets/booklets/leaflets) : NA
- Number distributed : NA

#### **8. Alignment with SDGs :**

SDG 3: Good Health and Well-being, SDG 12: Responsible Consumption and Production, SDG 13: Climate Action and SDG 15: Life on Land

#### **9. Alignment with Government Schemes : National Mission for Sustainable Agriculture (NMSA)**

#### **10. Outcomes of the Kisan Goshthi (In Brief):**

The programme significantly enhanced participants' awareness and understanding regarding the sources, impacts, and management of plastic pollution in soil ecosystems. Participants gained knowledge about the harmful effects of plastic residues and microplastics on soil health, crop productivity, environmental sustainability, and human health. The interaction encouraged greater interest in adopting eco-friendly alternatives, sustainable waste disposal practices, and community participation in reducing plastic pollution. The programme also strengthened awareness about responsible plastic use and the importance of public involvement in environmental conservation initiatives.



**11. Constraints Identified:**

Limited public awareness regarding the long-term impacts of plastic pollution on soil health, inadequate waste segregation and recycling facilities, excessive use of single-use plastics, and lack of access to affordable biodegradable alternatives were identified as major constraints. Participants also highlighted improper disposal of agricultural plastic residues and insufficient implementation of plastic waste management regulations at the local level.

**12. Suggestions / Recommendations:**

Regular awareness campaigns, training programmes, and community outreach activities should be organized to educate the public about sustainable plastic waste management. Promotion and accessibility of biodegradable and eco-friendly alternatives should be strengthened through government support and policy interventions. Proper waste segregation, recycling infrastructure, and strict implementation of plastic waste management rules are essential to minimize soil contamination. Encouraging sustainable agricultural and household practices can further reduce the accumulation of plastic residues in the environment.

**13. Conclusion:**

The programme successfully created awareness regarding the serious environmental and agricultural consequences of plastic pollution in soil and highlighted practical approaches for its management. It emphasized the collective responsibility of individuals, communities, institutions, and policymakers in reducing plastic waste and promoting sustainable environmental practices. The programme reinforced the importance of integrated efforts towards soil conservation, ecological sustainability, and public awareness for ensuring a cleaner and healthier future.

**Glimpse**





