**WOW Solutions**

**Problem Description**

There are a lot of waste materials generated from the agricultural fields. Farmers do not know how to deal with them. They either burn it or pile it up in a corner.

**Pain points and Statistical data**

**Burning:** Burning agricultural waste releases greenhouse gases, smoke, and particulate matter into the air, which can contribute to climate change and health problems. The WHO identifies smog from agricultural waste burning as one of the largest sources of ambient air pollution. Agricultural field burnings produced 67,309.81 tons i.e., approximately 20 % of total pm2.5 emission

**Soil degradation:** Residue accounts for 80% of the crop. This can cause nutrient imbalances, soil erosion, and decreased soil fertility.

**Disease transmission:** Stagnant agricultural waste can provide a breeding ground for flies that can transmit diseases. Cholera 61 (18.2%), malaria 158 (47.2%), lassa fever 36 (10.7%) and diarrhea 80 (23.9%)

**Problem validation**

* Many farmers do not have access to formal markets or buyers for agricultural waste, such as crop residues, husks, and straw.
* In some regions, there is little awareness or demand for agricultural waste as a raw material for industries like bioenergy, composting, or livestock feed.

The limited and improper management of the same has created an urgent need to devise strategies for their timely utilization and valorization, for agricultural sustainability and human-food and health security.

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| **Existing solutions** | **Their Limitations** |
| **Composting**  Reduces waste volume. Enhance soil health. Lowers greenhouse gas emissions | Requires space and time. Can attract pests if not managed properly. Nutrient loss if not balanced correctly. |
| **Animal Feed**  Converts waste into a valuable resource. Can reduce feed costs for farmers | Nutritional quality may vary. Potential health risks if not processed properly. Regulatory barriers regarding feed safety. |
| **Bioplastics and Materials**  Provides alternatives to petroleum-based plastics. Reduces plastic pollution. | Currently limited scalability. Higher production costs compared to traditional plastics. Concerns about land use for biomass cultivation. |
| **Carbon Sequestration**  Enhances soil carbon storage. Mitigates climate change effects. | Requires long-term commitment and management. Benefits may takes time to manifest. |

**Our solution**

Creating awareness among the farmers about the effective ways of converting their waste material into efficient products or even to sell them to industries which can use them as raw material. This reduces pollution and also provides an income according to the green waste they have.

**It’s Uniqueness**

We provide a platform for connecting farmers and industrialists.

* A farmer who has waste material can register the details in our website if he needs to

1. **Sell them**(we provide industrial connections through our web)
2. **Start a business**(instilling an entrepreneurial mindset among the farmers by encouraging them to own a cottage/small scale industry .We suggest ways to help them analyse the kind of waste and the requirements needed for the startup)
3. Make handcrafts ,artifacts or any other products for self-use.

* An industrialist who looks for green waste raw material can register his requirements with us

(we introduce farmers with apt raw materials to meet their requirements)

**Technical description and feasibility**

Our main work is on collection and storage data. Finally processing it as per the requirements of the user prompts.