

## Food and Agricultural Waste Management for Sustainable Agriculture

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**Abstract :** Agriculture encompasses crop and livestock production, forestry, and fisheries for food and non-food products. Farmers combine land, water, commercial inputs, labor, and their management skills into practices and systems that produce food and fibre. Harvesting of agricultural produce is either followed by the processing of fresh produce or storage for later consumption. All these activities result in a vast generation of waste in terms of crop residue or food waste. So, a large amount of agricultural waste is produced every year. Waste arising from food and agricultural sectors has the potential for vast applications. So, agricultural waste management is an essential component of sustainable agriculture. The major portion of the waste comes from the residues of crops on farms, food processing, livestock, aquaculture, and agro-industry waste. Therefore, management of these agricultural wastes is an important task, and it requires robust strategic planning. It can contribute to three pillars of sustainable agriculture development. It protects the environment (environmental pillar), enhances the livelihoods of farmers (economic pillar), and can contribute to increasing the sustainability of the agricultural sector (social pillar). This paper addresses the essential technological aspects, possible solutions, and sound policy concerns to accomplish long-term way out of agriculture waste management and to minimize the negative impact of waste on the environment. The author has developed a sustainable agriculture waste management model for improving the sustainability of agriculture.

**Keywords :** agriculture, development, management, waste

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