

THE IMPACT OF COMPOSTING ON CLIMATE CHANGE

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Currently one-third of all food produced is being wasted (equivalent to 10% of global GHG emissions). Preventing food waste could cut overall global GHG emissions by 2–5%. When food is discarded, all inputs used in producing, processing, transporting, preparing, and storing discarded food are also wasted. Food loss and waste also exacerbates the climate change crisis with its significant greenhouse gas (GHG) footprint. Production, transportation, and handling of food generate significant Carbon Dioxide (CO₂) emissions and when food ends up in landfills, it generates methane, an even more potent greenhouse gas. Composting can save methane emissions from landfills by 78% [1].

The connection between food loss and waste and climate change is increasingly recognized as important and so is the link between climate change and agriculture and sustainable development.

Proper composting of the organic waste we generate in our daily can reduce the dependence on chemical fertilizers, help recover soil fertility, and improve water retention and the delivery of nutrients to plants. Separate collection of organic waste, composting, mechanical-biological treatment of residual waste, and biologically active landfill cover can reduce methane emissions by an average of 95%.

More broadly, by reducing food waste, composting also helps to reduce greenhouse gas emissions that affect climate change. Food loss and waste generate an estimated 8–10% of global greenhouse gas emissions while using land and water resources increasingly put pressure on biodiversity.

Composting benefits the soil quality by increasing nutrient storage capacity, biochemical properties, crop production, and water retention; this also prevents floods, mudslides, and loss of food crops [2].

References

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