



AGRO-ECONOMIC RESEARCH CENTRE
Ministry of Agriculture and Farmers' Welfare
Government of India
VISVA-BHARATI
Santiniketan



Abstract: This study develops a theoretical model that incorporates recycling waste as a strategic driver of engineered economic growth in the circular economy paradigm. The model formally reintegrates the stock of waste as a productive resource input into the economic system. Our theoretical model shows that recycling waste contributes positively to the optimal economic growth path. This study demonstrates that recycling waste can serve as a powerful engine for economic growth by transforming environmental challenges into economic opportunities. Analytical results demonstrate that recycling can mitigate resource constraints, reduce ecological pressures, and support sustained increases in output. Truly, recycling waste promotes economic growth. The process of transforming waste into valuable resources creates a sustainable industrial ecosystem and contributes to GDP. The results indicate that recycling serves as a dual-purpose mechanism, addressing environmental constraints while enhancing economic performance. These findings suggest that integrating recycling strategies into economic policies can help nations promote sustainable development and resource efficiency. Thus, recycling emerges not only as an environmental imperative but also as a viable engine for sustained economic advancement. Recycling is a simple and powerful way to contribute to a healthier planet.

EXPERT'S TALK

on

"Theoretical Model of Recycling Waste Engineered Economic Growth"

by

Soumyananda Dinda

**Professor of Economics
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**Venue: Seminar Hall,
Agro-Economic Research Centre**

Date: 12th May 2026

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Time: 03:00 PM

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