

Agriculture in the Circular Economy

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Challenges of Current Agricultural System



Contributes almost one third of green house gas emissions while using 38% of global land mass and 70% of global freshwater.



Heavy use of chemical fertilizers and pesticides, and non-resilient seed varieties results in wastage, causing loss in productivity and ill health.



High costs of production along with risks and insecurity causing distress migration from rural to urban areas.



Ecosystem degradation and biodiversity loss contributing to climate crisis.



Agriculture crisis poses risks for all – producers, consumers, and the overall planet.



Case Study: APCNF – Andhra Pradesh Community managed Natural Farming

Government of Andhra Pradesh (a state in India) adopted Natural Farming to transform the state's food systems.

ZBNF (Zero Budget Natural Farming) principles used:

- Soil covered with crops 365 days a year.
- Diversity of trees and crops along with crop rotation and companion planting done to maintain soil health and deter pest attacks.
- Minimal disturbance of soil and integration of animals on farmlands.
- Zero usage of chemicals - only bio stimulants and bio pesticides used, which are derived from nature or prepared from animal dung and urine.
- Saving and using of indigenous seeds for resilient crops.

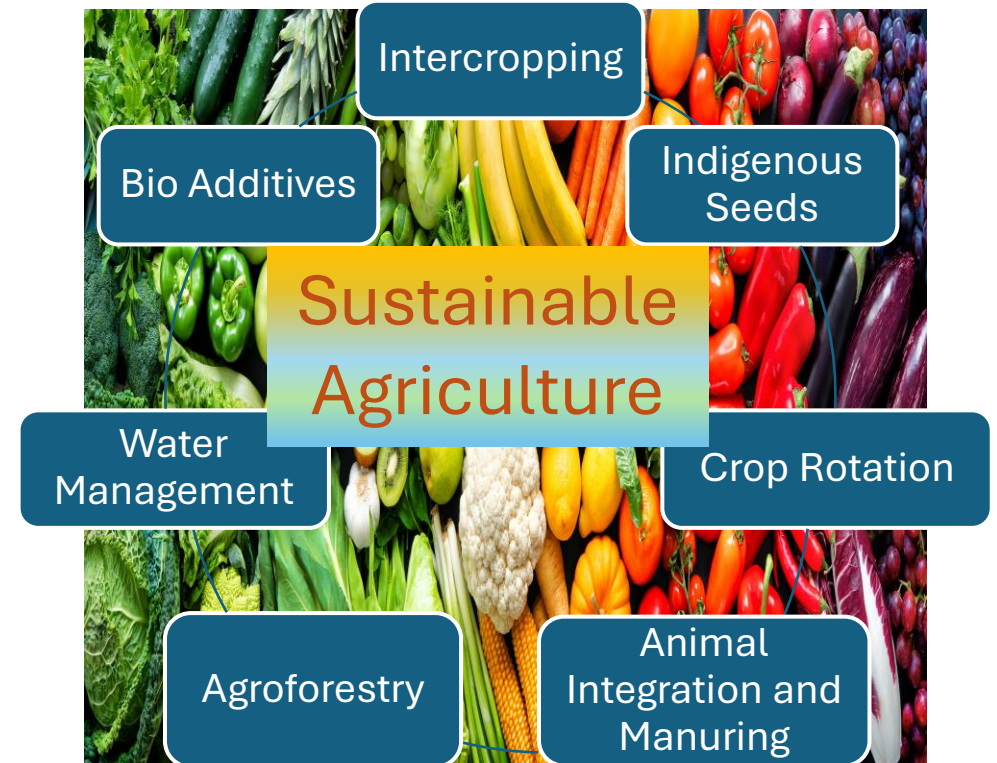


Image Source: apcnf.in

Sustainability and Circular Economy

Zero Budget Natural Farming, Agroforestry, and Syntropic Farming principles use the planet's natural recycling process for production of crops, and therefore is a great example of Circular Economy.

- **Regenerates soil health.**
- **Promotes biodiversity.**
- **Reduces green house gas emissions and tackles climate change.**
- **Cuts farmer costs of production by reducing input requirements.**
- **Creates zero waste on farmlands by recycling animal and farm waste.**



Interest and Importance of the Agriculture Industry in a Circular Economy

- Food is an integral and necessary part of human life.
- Agriculture and farmland management is the basis of food production.
- Conventional farming methods contribute significantly to food insecurity and climate crisis.
- Natural farming provides nutrition and food security while preserving and renewing biodiversity.
- Circular agricultural methods connect human beings to the soil and create a spiritual relationship with earth necessary for mental and social health.
- Regenerative agriculture has the potential to address ecological, social, and economic challenges towards a healthier thriving planet.





Thank You !

For more information, watch these videos:

- <https://www.youtube.com/watch?v=m3d7X6UluNk>
- <https://youtu.be/vF40gF-PUcs>

