



Limpopo Regenerative Emerging Agriculture Challenge

A National Clean Innovation Challenge initiative advancing emergent, climate-smart agricultural innovation.

FAQs / Challenge Terminology

1. Regenerative Agriculture

Farming practices that restore soil health, biodiversity, and ecosystem function by minimising chemical inputs, enhancing organic matter, and promoting natural nutrient cycles.

2. Clean Technology (Clean Tech)

Innovations that reduce negative environmental impacts through energy efficiency, renewable energy generation, resource recovery, and sustainable production processes.

3. Water–Energy–Food Nexus

An integrated approach recognising the interdependence of water, energy, and food systems—ensuring that interventions in one sector enhance rather than compromise the others.

4. Agrivoltaics

The simultaneous use of land for solar power generation and agriculture, allowing crops and solar panels to coexist to optimise land use and resource efficiency.

5. Off-Grid Renewable Energy

Energy systems (such as solar PV, biogas, or mini-grids) that operate independently of the national grid to power rural farms, irrigation systems, and agro-processing.

6. Precision Agriculture

Technologies such as sensors, drones, and AI used to monitor and optimise crop growth, irrigation, and nutrient management for improved productivity.

7. Climate-Smart Agriculture (CSA)

An integrated approach that sustainably increases productivity, enhances resilience to climate change, and reduces greenhouse gas emissions.

8. Circular Economy

An economic model focused on designing out waste, keeping materials in use, and regenerating natural systems within agricultural value chains.