Exploring Climate Solutions through Water and Soil Health in Tribal Ecosystems

The Wicked Challenge

Unplanned human activities and climate change have led to degraded soil and reduced water availability in tribal and hilly regions, threatening both livelihoods and ecological balance.

BUT

Reviving indigenous tribal practices rooted in agroecology offers a regenerative path to restore soil health and water-use efficiency, while building community resilience to climate change.

Common agreement

- **Tribal communities** as key contributors to climate resilience through traditional agricultural and ecological practices.
- **Chaukha system** of Lapodiya, Rajasthan, is a commendable model for enhancing soil moisture using three land models: undulating, minimum slope, and even slope.
- "**3Ms"—Matter, Soil Moisture, and Soil Microbial Life**—were emphasized as essential for sustainable agriculture.
- **Indigenous production-consumption systems** as vital to community resilience and sustainability.
- **Multi-cropping** systems ensures household-level food and nutrition security.
- **Social metabolism** as a guiding concept to harness community-driven, sustainable development.

Speaker
Dr. Rajeswari Raina
Professor, Shiv Nadar University

Emphasised two lessons: living within nature's nested circles and promoting indigenous production-consumption systems.

Compared local knowledge systems with global climate science.

Introduced the "3Ms"—Matter, Soil Moisture, and Soil Microbial Life.

Advocated for multi-cropping systems to ensure food and nutrition security at the household level.

Speaker
Padma Shri Laxman Singh
Gram Vikas Nav Yuvak Mandal, Lapodiya

We need to preserve soil health in Tribal Ecosystem

Chaukha system is a proven model to improve soil moisture.

We use three models of Chaukha System to address different land types (undulating, minimum slope, even slope)

Moderator
Shraman Jha
CEO, Hindustan Unilever Foundation

Leveraging social metabolism

Sustainable solutions exist within our communities, particularly those of tribal populations.