Plenary

Rethinking Agriculture through Regenerative Practices: Restoring Soil, Water and Nature's Balance

In collaboration with PepsiCo Pakistan

Agriculture remains central to Pakistan's economic stability, food security, rural livelihoods and environmental sustainability. Yet the sector is facing increasingly interconnected challenges: climate variability, declining soil fertility, groundwater depletion, inefficient irrigation, biodiversity loss and rising input costs. Intensive tillage, excessive dependence on chemical inputs and unsustainable water extraction place growing pressure on the natural resources on which agricultural productivity depends. Sustaining production, therefore, requires rethinking how food is grown, agricultural landscapes are managed and farming communities are supported. Regenerative agriculture offers a shift beyond approaches focused primarily on maximising yields towards farming systems that restore soil health, improve water retention, enhance biodiversity and strengthen resilience while maintaining productivity and economic viability. Practices include reduced soil disturbance, crop rotation, cover cropping, integrated nutrient management, organic matter restoration and precision irrigation. Rather than a fixed checklist, regenerative agriculture is a broader transition in which ecological restoration, farmer prosperity and long-term food security reinforce one another. For Pakistan, this transition is particularly urgent. Agriculture accounts for the dominant share of freshwater withdrawals, while inefficient irrigation and groundwater overextraction threaten long-term water security. Soil degradation, low organic matter, shifting precipitation and rising temperatures add to farm-level vulnerability. Scaling change requires agricultural and water policies that reward resource stewardship and enable farmers especially smallholders to access finance, extension, technology and markets.

The private sector can help accelerate this transformation through agricultural sourcing, research, technology and long-term partnerships with growers. PepsiCo Pakistan is a relevant example of a major food and beverage company increasingly putting agriculture at the centre of business resilience. Beyond its familiar consumer brand identity, its agricultural supply chain supports local potato sourcing, seed innovation, grower engagement and farming practices linked to its global PepsiCo Positive (pep+) agenda. PepsiCo Pakistan reports sourcing all its potatoes locally and engaging in regenerative agriculture initiatives across more than 20,000 acres. Its agricultural investments including a tissue culture laboratory, farmer development and approaches to water-use efficiency demonstrate the potential for large food companies to serve as agricultural ecosystem partners rather than only purchasers of commodities. At the global level, PepsiCo reported in July 2026 that regenerative, restorative and protective practices had reached 4.7 million acres, against an ambition of 10 million acres by 2030. For the purposes of this plenary, PepsiCo Pakistan can, therefore, be presented as an agriculture-centred food and beverage enterprise helping advance responsible sourcing and farming innovation not as having formally changed its corporate classification to an agricultural company.

However, corporate pilots alone cannot transform agricultural landscapes. Questions remain around transition costs, farmer profitability, water accounting, independently measurable improvements in soil health, biodiversity and equity, and how interventions in individual supply chains can contribute to wider landscape-level outcomes. The public sector, agribusinesses, research institutions, financial organisations and farmer communities must jointly develop enabling frameworks. Against this backdrop, this high-level plenary will convene policymakers, industry leaders, researchers, development partners and farmer representatives to explore viable pathways to regenerative and nature-positive farming in Pakistan. The discussion will place policy incentives, farmer economics, water stewardship, innovation and public-private partnerships at the centre of national agricultural transformation.

The overarching objective is to advance national dialogue on transitioning Pakistan's agricultural sector towards regenerative, climate-resilient and nature-positive farming through policy innovation, private-sector investment and collaborative action. More specifically to:

- Reimagine Pakistan's agricultural development model by examining regenerative agriculture's potential to restore soils, improve water efficiency, protect biodiversity and strengthen productivity and climate resilience.
- Highlight the evolving private sector role in agricultural transformation, drawing on PepsiCo Pakistan's agriculture-centred supply chain model, local sourcing, farmer partnerships, research, precision technologies and regenerative practices.
- Explore policy and institutional enablers for embedding regenerative agriculture into agricultural, water, adaptation and food security frameworks, including incentives, extension services and impact measurement.
- Identify financing and investment opportunities including blended finance, affordable agricultural credit, procurement commitments and risk-sharing instruments to help farmers adopt regenerative practices.
- Strengthen Public-Private Partnerships (PPPs) for landscape-level restoration and resource stewardship among government institutions, agribusinesses, universities, development partners and farming communities.
- Promote an inclusive transition that improves rural livelihoods and provides meaningful opportunities for smallholders, women farmers and young agri-entrepreneurs.

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