



Climate Change & Food Security: Does Regenerative Agriculture Offer Hope in Despair?

The increasing impacts of climate change and environmental degradation around the globe has highlighted the importance of incorporating a sustainability approach in all sectors of the economy. The Sustainable Development (SD) approach ensures that human-ecological support systems are sustained for future growth through incremental changes (Gibbons et al., 2018). The Regenerative Development (RD) approach – that goes beyond sustainable development approaches and provides system-wide techniques for a variety of development strategies - offers a transformational approach to global development issues, growth, and outcomes. RD outlines development as a ‘system of developmental technologies and strategies that work to enhance the ability of living beings to coevolve, so that the planet continues to express its potential for diversity, complexity, and creativity through harmonizing human activities with the ongoing evolution of life on our planet, even as we continue to develop our potential as humans’ (Mang and Reed 2020).

The RD approaches place more emphasis on qualitative assessment of sustainable development opportunities rather than quantitative alone. Among RD, regenerative agriculture is an approach to farming that seeks to improve soil health and soil fertility while protecting water resources and biodiversity. Restoring soil health helps capture increased levels of carbon from the atmosphere in soils and plant biomass. Healthier soils are also more resilient to the impacts of climate change and can increase productivity of crops, helping improve farmers’ livelihoods and enhancing food security. Mang and Reed (2020) outline three key phases for regenerative practices. The first evaluates the whole system’s actors and enabling conditions. The second seeks to translate such assessments into integrated plans and designs for regenerative activities, while the third fosters a culture of co-evolution as stakeholders become aware of integrated social, economic, and environmental opportunities that have emerged over time.

Tied to SD and RD approaches are concerns about food security, which is the availability, accessibility, and affordability of food for all individuals at all times, have been increasing overall globally. According to the World Food Programme (WFP), as many as 783 million people are unsure of where their next meal is coming from. The situation of food security in Pakistan is a particular matter of concern. In 2021, the FAO estimated that there was prevalence of moderate or severe food insecurity in 43.4% of the total population. One of the reasons for the increasing rate of insecurity is unsustainable agricultural practices, and the answer lies in promoting sustainable practices in the form of ‘Regenerative Agriculture.’

Agriculture sector in developing countries, like Pakistan, is facing many emerging challenges that often involve increased cropping intensities and application of poor quality groundwater leading to water logging and salinity issues, decreasing soil fertility and rising desertification as well as increased but inefficient use of fertilizer and pesticides. These adversely impact farm income and profitability overtime; and have also created serious challenges to meet ever-rising food requirements of the country.



Yet, how regenerative development can be extended to safeguard social equality, diversity for farmers, and consumers and better natural resource management in agriculture is a big question. Likewise, how RD approaches can help the agriculture sector avoid risks, transform environmental actions, and build better relationships among stakeholders for better sustainability is a challenge as well as opportunity. In this context, this plenary aims to:

1. Discuss and highlight the importance of Regenerative Development for the agriculture sector in Pakistan and its chances of improving food security;
2. Explore how the public-private sector can contribute to Regenerative Development in agriculture in the country; and,
3. Explore key intervention strategies that can trigger domestic Regenerative Agricultural Approaches.

References

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Panel Organisers

Mr Kashif Majeed Salik, Associate Research Fellow, Sustainable Development Policy Institute, Islamabad, Pakistan
Email: kashif@sdpi.org

Mr Mobeen Ali Khan, Project Associate, Sustainable Development Policy Institute, Islamabad, Pakistan
Email: mobeen_khan85@live.com

Ms Aatekah Mir Khan, Corporate Manager Public Policy & Issues, Nestlé Pakistan

Ms Namwar Yusuf Rahman, Manager Sustainability, Nestlé Pakistan