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"Resilience of agricultural systems against crises"

Issues and Challenges of Current Agricultural Patterns in India: A Step Towards Sustainability

ITISHREE PATTNAIK, JHARNA PATHAK

Gujarat Institute of Development Research, India

Abstract

The gains of the green revolution in India of the late sixties, which led to a phenomenal increase in crop yield, are slowly losing ground. Intensive agriculture under the green revolution led to depletion of soil productivity, water logging, salinity and ground water degradation. High-valued crop production and diversification with commercial value chains, particularly by large farmers, especially for export markets, may also undermine resource sustainability. With the recent spurt in food prices in the wake of other uncertainties arising out of declining growth in global food production, financial and economic slowdown, climatic variability besides massive land grabbing in parts of the developing world, the challenge is to provide for the food security of 75–105 million new poor globally without depleting land or water resources. In this context, this paper tries to analyse the negative externalities of intensive agriculture in the face of promoting food security to the ever growing population. The study will examine various approaches to meet these challenges. One such method would be integrated farming systems, which are pro-poor, pro-environment and believed to ensure economically beneficial and environmentally friendly agriculture. The study will examine organic farming as an approach to address these challenges. There are ample evidences in the literature to suggest that this would be adopted as an approach to promote economically profitable and environmental friendly agriculture. Using empirical studies already carried out by scholars in India, this paper aims to understand how far such an intervention would promote higher yield and ecologically sustainable agriculture. It also highlights the need for empowering agriculture extension services to promote scientific knowledge to farmers blended with their traditional wisdom.

Keywords: Integrated farming, organic farming, sustainable agriculture