Alternative method of farming for sustainable agriculture and ecological security

Kaustubha Nand Bhatt and Manit Boonprong
University of Allahabad, India

Statement of the Problem: System of Rice (also Root or Crop) Intensification (SRI/SCI)) is a promising resource conserving method of crop cultivation grounded in the physical and biological sciences. The method is now producing agricultural ecosystems that could engage various stakeholders in a participatory manner to increase yield, resource use efficiencies and income. This paper analyzes the experiences of the farming communities in practicing SRI/SCI from different parts of India as an alternative method of sustainable agriculture.

Methodology & Theoretical Orientation: Based on secondary data sources, the paper explores the outcomes of the SRI/SCI for enhancing productivity and environmental sustainability. The post War modern agricultural practices led to both biotic and abiotic stress sacrificing ecological security and biodiversity for maximizing output. SRI is a shift from input centric to farm and farmer centric method. The method is a process driven approach and a return to learning by doing.

Findings: The SRI, perhaps, is not new to India. In the 1920s farmers in Tamil Nadu practiced single seeding planting and obtained a yield of 6 tonnes per hectare, when the average yield then was 1.5 tonnes per hectare. Presently almost a million farmers are practicing SRI in India in more than 350 districts. It became part of the National Food Security Mission in 2007. A farmer from the ‘backward’ region of Bihar in India has claimed a yield of 22.4 t/ha of rice using SRI method in 2016. Many farmers across the country are learning the practices of SRI from one another. The core practices of SRI have been applied to sugarcane, wheat, ragi, mustard and vegetable production with success.

Conclusion: We are indeed poised for a fine blending of farmers’ knowledge and experiences and the present practices for agro ecological crop management in the future.

Biography
Kaustubha Nand Bhatt is a Professor at G. B. Pant Social Science Institute, Allahabad Central University, Allahabad. He is an environmental economist and has worked on several developmental issues. He has authored, edited and co-edited several books including System of Rice Intensification, Agrarian Change and Small Farmers: Super Markets, Viability and Food Policy, Child Labour in India: Empirical Evidence from Glass and Bidi Industries, Consumers, Consumerism and Consumer Protection: Indian Context, Disaster Risk Management Programme in Uttar Pradesh: Learning from Some Case Studies, Population, Environment and Health: Emerging Concerns, Social Development, Uttarakhand: Ecology, Economy and Society and has published in various journals.

knbhatt1@rediffmail.com, bhattkaustubha@gmail.com

Notes: