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"Management of land use systems for enhanced food security: conflicts, controversies and resolutions"

Agroecology: Enhancing Food Sovereignty and Resilience to Climate Change

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Abstract

The realisation of the contribution of peasant agriculture to food security in the midst of scenarios of climate change, economic and energy crisis, led to the concepts of food sovereignty and agroecologically based production systems to gain much attention in the developing world in the last two decades. New approaches and technologies involving application of blended modern agricultural

science and indigenous knowledge systems and spearheaded by thousands of farmers, NGOs, and some government and academic institutions are proving to enhance food security while conserving agrobiodiversity soil and water resources conservation throughout hundreds of rural communities in the developing world. Case studies from Latin America are presented to demonstrate how the agroecological development paradigm based on the revitalisation of small farms which emphasises diversity, synergy, recycling and integration, and social processes that value community participation and empowerment, proves to be perhaps one of the only viable options to meet present and future food needs. Given the present and predicted near future climate, energy and economic scenarios, agroecology has emerged as one of the most robust pathways towards designing biodiverse, productive, and resilient agroecosystems available today.

Keywords: Agrobiodiversity, agroecology, climate change, paradigm