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“Resilience of agricultural systems against crises”

Community Adaptation Strategies for Increasing Resilience of Homegardens – Case Study from Southern Burkina Faso

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Abstract

Agriculture remains the backbone for the economies of many countries and plays a critical role in feeding the world's most vulnerable people. Rapid population growth, loss of soil fertility, among others, have already impacted negatively on food production. Additionally, climate change has compounded the problem. In order to develop a resilient production system, farmers need to reorganise and find adaptation strategies. An exploratory research was conducted to study homegardens and farmer adaptation strategies in Burkina Faso. The Bieha district was purposively selected for the study. The initial Rapid Rural Appraisal was complemented by a household survey. Tools of data collection included; personal observation, key informant interview, and focus group discussion. For the survey, eighty households were selected based on systematic sampling. Data was collected by individual interviews at household level, and for statistical calculations, the households were subsequently categorised as small, medium and commercial based on the size of their homegarden. All respondents mentioned droughts, unpredictable rainfall patterns, floods, fluctuating market prices and bushfires as their most common crises. 100 % of respondents have been affected by droughts/unpredictable rainfalls, 65 % by floods and 20 % by bush fires. Respondents agreed that building strong social systems and institutions, diversification of income and livelihood sources as well as the adoption of better natural resources management practices would ensure more resilient production. There was a significant positive correlation between number of income sources and household total income. Similarly, a significant positive correlation was found between number of crop species grown and income generated. The households who belonged to cooperatives had higher incomes from sales of their homegarden products than others who sold individually. In conclusion, it is clear from the study that farming systems need to be adapted so as to ensure that they remain resilient in the face of crises. The outcome of this research has shown that local people are themselves aware of the threats that they face but would need support by way of capacity building so that their adaptation strategies can be well and appropriately developed.

Keywords: Adaptation, crises, diversification, homegarden, livelihood, resilience