

73. Does diversification in smallholder coffee landscapes help to face climate change risk? Answers from Nicaragua

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Introduction: Despite the growing emphasis on diversification to manage climate change risks and improve food security in coffee landscapes, there are no criteria developed to quantify the status, need and outreach of diversification.

Objectives: We aim to identify with local stakeholders: 1) different dimensions of on-farm diversification including crops, products, markets and practices; 2) its relationship with climate risk management; and 3) the need for specific measures to make use of the potential of diversification to make coffee landscapes resilient to climate change.

Methods: We carried out a literature review highlighting the benefits and drawbacks of diversification for smallholders of coffee landscapes. Institutions and focal groups from two communities in San Ramon, Nicaragua were consulted about existing diversity in coffee farms and what on-farm diversification would represent for them. Taking into account gender, we conducted interviews in farm households to understand how actual diversification is related to climate risk management and food security status, and to identify specific needs to make use of the potential for diversification.

Results and discussion: Though a large diversity of agricultural species is grown in the landscape, most on-farm activities are concentrated around coffee, maize and common beans and take place between May and August, which coincide with the months of seasonal hunger. This suggests a high potential for diversification which is currently little utilized to improve food security and to adapt production system to climate variability. We highlight which activities related to diversification are recommended to make coffee landscapes more resilient to climate change. To embed our results in local development processes and local research we linked up to existing initiatives Campesino a Campesino and the local university agronomy faculty.

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