



research brief

Agroecology and livelihoods in global coffee systems

Diverse, multifunctional farms key to sustainability

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THE ISSUE

Coffee is a booming business, with the specialty coffee sector growing steadily over the past 25 years. Smallholder farmers who grow high quality coffee beans are central to the specialty coffee value chain, yet they face numerous urgent challenges, including:

- Unexpected shocks such as coffee leaf rust and Covid-19,
- Increasing impacts of climate change,
- Unpredictable market forces, and
- Seasonal food insecurity.

These challenges are especially acute for coffee farmers who work small plots of land.

Improving the livelihoods of smallholder coffee farmers is key to developing a sustainable, productive specialty coffee sector. An increasing body of research, along with efforts such as the Coffee Price Crisis Response Initiative led by the Specialty Coffee Association, shows how different actors in the global coffee sector play a vital role in supporting steady, environmentally sound production of specialty coffee by maximizing the social and environmental synergies that are found in smallholder agroecological coffee farms.

ENGAGED RESEARCH

This brief summarizes collaborative, participatory action research (PAR) on characteristics and impacts of diversification in coffee systems in Mexico and Nicaragua. Insights from this research is applicable to other rural coffee growing regions as well. The research is based on agroecology, a holistic approach that applies ecological science to agriculture in order to limit impacts and optimize benefits to people and the environment.

The research teams engaged with coffee farmer cooperatives, farmers, and other stakeholders to advance

our understanding of how on-farm diversification affects smallholder coffee farmers, communities, and their ability to keep growing coffee. The findings have directly informed strategies to address farming challenges, with implications for the entire coffee supply chain.



The research team worked with farmers to create calendars of farm activities for different agricultural products. The learning exchange informed on-farm decisions and highlighted opportunities to improve food and livelihood security.

In contrast to other research efforts that rely on one-time survey data to investigate the role and potential of diversification in the lives of smallholder coffee farmers, this PAR research team has followed smallholder farmers for over two years. Through monthly visits, participatory workshops and interviews, the researcher team – including academics and community facilitators – have worked with cooperative representatives and members to learn what seasonal pressures

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they face, and how activities and agricultural practices can be combined to support farmer livelihoods and continued production of high quality coffee.

KEY RECOMMENDATIONS

(1) Supporting diversified agroecological farms generates multiple benefits for farmers and global coffee companies

Diversified agroecological coffee systems produce multiple benefits for people and nature. When farmers produce a variety of crops, livestock, and other valuable farm products such as honey, they can develop multiple streams of income. Such diversification in farm activities can make farmers more economically secure and improve their ability to continue growing high quality coffee. In addition, diversification can increase food security, decrease emigration, and strengthen resilience to various shocks and stressors. Diversification does not compete with coffee production; rather, it represents an important strategy that produces multiple benefits for both farmers and industry partners. Read more [here](#).

(2) Actors in the global coffee sector could support multiple strategies to improve farmer livelihoods and environmental sustainability in coffee production

Using multiple policy, management, or industry strategies can have a synergistic effect and hedge against risks. Several options exist for advancing a sustainable specialty coffee sector, for example:

- Support multifunctional agroecological coffee farms that produce high quality coffee as well as other income streams and food for farmer households. Long-term diversification programs could work with coffee farmers and organizations to secure technical and financial support.
- Improve existing tools such as coffee certifications and payment for ecosystem services programs to leverage support for diversified agroecological coffee farms.

- Explore opportunities to expand value chains by bringing other products such as honey, cacao or bananas to market.

(3) Investing in new partnerships and innovative research can improve whole agroecosystems

Actors in the global coffee sector could develop research partnerships that explore how to support diverse, multifunctional farm ecosystems. Agroecology-based, participatory research that engages meaningfully with farmers can inform decision-making – across the coffee value chain – about how to realize more sustainable coffee production.

CONCLUSION

Research about the social and ecological dimensions of coffee farming can inform strategies for a more sustainable and just global coffee sector. Ongoing research is exploring impacts of on-farm diversification on coffee farmers' food and livelihood security as well as climate change resilience. These topics will be increasingly important to the sustainable production of quality coffee.

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For more information

<http://www.uvm.edu/agroecology/coffee/>
<https://en.cafediversificacioniap.org/>

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