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“Reconcile land system changes
with planetary health”

Agri-food transformation – how can value chain actors foster climate resilience?

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Abstract

Climate change and environmental degradation pose significant challenges to agri-food supply chains, threatening the resilience of both businesses and farmers. These challenges are compounded by social and economic injustices, such as disparities in land access and unequal exchange, which are prevalent along often lengthy supply chains. Addressing these interconnected issues requires a holistic and collaborative approach involving diverse stakeholders, including farmers, government bodies, researchers, and industry participants.

This research focuses on fostering climate resilience and social transformation within agri-food value chains, with a particular emphasis on family farmers and agricultural communities, including those in tropical regions. By examining national and international best-practice examples across sectors such as coffee, cocoa, herbs, and livestock, we aim to identify effective strategies for transforming value chains into more environmentally sustainable and socially equitable systems. Our transdisciplinary approach integrates insights from interviews with businesses, workshops with farmers, and collaborative discussions with stakeholders to explore scaling-out, scaling-up, and scaling-deep strategies for transformation.

Key findings highlight the importance of agroecological practices, proximity, and resilience factors in driving social transformation. Gender equity and inclusion emerge as critical components, with results indicating that high self-efficacy and the active participation of female actors along value chains can significantly enhance resilience and transformation processes. Workshops with farmers revealed that strong relationships with other value chain actors and a clear vision for the future are essential for preparing for climate change impacts and advocating for their communities. Best-practice examples show a strong dedication to foster resilience of farming communities and follow a transformative approach to agri-food supply chains, which focus on the contributions of innovator networks, female farmer groups, and agroecological training (e.g., agroforestry) to enhance transformation. Our findings underscore the potential of community-driven strategies, co-created with businesses and aligned with shared sustainability goals, to advance resilience and social transformation in agri-food systems.

Keywords: Agri-Food-Supply Chains, Agro-ecology, Community-driven transformation, Gender