



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



National adaptation policy adopted in Nicaragua and resulting investments in coffee and cocoa sector

May 2014

CCAFS Outcome Case

Center	International Center for Tropical Agriculture (CIAT)
Year	2013
Contact	Peter Läderach
Theme	Long term adaptation
Geographic focus	Latin America
Summary <p>CIAT's research showed that coffee production is highly sensitive to climate change and that by 2050 coffee growing areas will move approximately 300 meters up the altitudinal gradient and push farmers at lower altitudes out of coffee production, increase pressure on forests and natural resources in higher altitudes and jeopardize the actors along the coffee supply chain. For cocoa the picture is not as dramatic as coffee but shifts in production areas are also likely to happen by 2050. Recognising these impacts, the Nicaraguan Government in their National Adaptation Plan for agriculture prioritized the adaptation of smallholder coffee farmers' livelihoods, and market-based diversification of coffee-based income at the national level. The National Policy led the government of Nicaragua to request IFAD support in developing climate change adaptation actions within in the coffee and cocoa supply chain. IFAD has committed USD 24.12 million to facilitate productive investments and provide technical assistance to improve productivity and increase adaptation capacities to climate change of poor smallholder producers of cacao and coffee in Nicaragua. These efforts will be complemented by the strengthening of relevant public institutions and policies oriented at providing improved climate-proofed inputs to production, improved information systems on weather events, as well as a general strengthening of the public sector to formulate incentive-based public policies for smallholder farmers.</p> <p>In addition to these investments, private sector investments were also leveraged based on CIAT's research. In 2012, Green Mountain Coffee pledged more than USD 5.3 million in grants to support food security efforts by NGO partners throughout their supply chain, leading to direct benefits to smallholder farmers.</p>	
Key facts <ul style="list-style-type: none">- By 2050, coffee growing areas will move approximately 300 meters up the altitudinal gradient and push farmers at lower altitudes out of coffee production.	

- Nicaragua's National Adaptation Plan for agriculture prioritises the adaptation of smallholder coffee farmers' livelihoods, and market-based diversification of coffee-based income.
- IFAD has committed USD 24.12 million to facilitate productive investments and provide technical assistance to improve productivity and increase adaptation capacities to climate change of poor smallholder producers of cacao and coffee in Nicaragua.

Lessons: key elements of success

- Effective and long term engagement with Government, NGO, and private sector partners.

Further reading

- [Are there synergies between climate change adaptation and mitigation in coffee production?](#)
- [Arabica's magic skin](#)
- Nicaragua's [National Adaptation Plan for Agriculture](#)

Related research outputs

Baca, M., Läderach, P., Hagggar, J., Schroth, G., & Ovalle, O. (2014). An integrated framework for assessing vulnerability to climate change and developing adaptation strategies for coffee growing families in Mesoamerica. *Plos One*, 9(2), e88463.

Läderach, P., Lundy, M., Jarvis, A., Ramirez, J., Portilla, E. P., Schepp, K., & Eitzinger, A. (2011). Predicted impact of climate change on coffee supply chains *The Economic, Social and Political Elements of Climate Change* (pp. 703-723): Springer.

Läderach, P., Hagggar, J., Lau, C., Eitzinger, A., Ovalle, O., Baca, M., Jarvis, A., & Lundy, M. (2010). Mesoamerican coffee: building a climate change adaptation strategy. *CIAT Policy Brief no. 2*. Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia.

Schroth, G., Läderach, P., Dempewolf, J., Philpott, S., Hagggar, J., Eakin, H., Castillejos, T., Moreno, J.G., Pinto, L.S., Hernández, R., Eitzinger, A., Ramirez-Villegas, J. (2009). Towards a climate change adaptation strategy for coffee communities and ecosystems in the Sierra Madre de Chiapas, Mexico. *Mitigation and Adaptation Strategies for Global Change*, 14(7), 605-625.

CCAFS is led by



Strategic partner

