



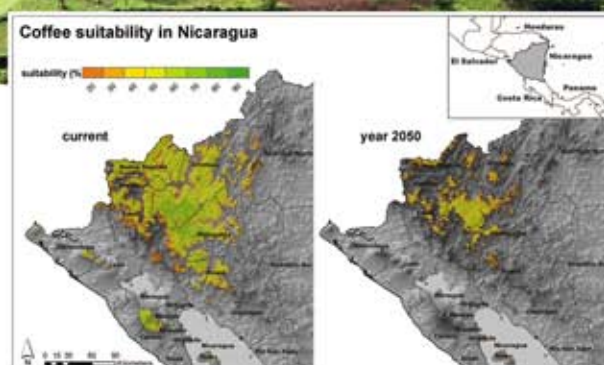
Few doubt that agriculture will be severely affected by climate change, but what can be done about it? We urgently need to know:

*What do we need to adapt to?
Where are the greatest needs?
How might we best adapt?
When is action needed?*

When these questions are answered, research and development investments can be well-timed and fine-tuned. In CIAT we call these *adaptation road maps*. Using scenario analyses and spatial modeling we are actively constructing them for different regions, crops and communities.

What do our analyses say?

- Crop improvement is a critical component of any climate change adaptation strategy. For example, our analysis shows that by 2020, the development of drought-tolerant beans will be essential. For cassava, the opposite is true: it is all about waterlogging and cold tolerance in order to maximize/protect yields.
- The geography of agriculture is going to change, with profound implications for rural



livelihoods. In Central America, for example, half of coffee production could be lost by 2050 leaving hundreds of thousands of farmers needing alternative sources of income. Our models show how and where certain agronomic practices could minimize the impact.

We can adapt, but there is no time to lose

Through our analysis we can tell governments, NGOs, researchers and development practitioners what adaptation measures are required, and where, how and when they should be implemented. With these *adaptation road maps* we hope to contribute to a food secure and poverty-free world in spite of the challenges we face as a society, both in the long and short term.

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