Coffee Farmers and Climate: Adapting to a Changing Environment
Laura Vigeland, Robert D. Clark Honors College, University of Oregon

Effects of Climate Change on Coffee Production in Latin America

Temperature
Increased temperatures due to climate change decrease coffee quality and production.

Pests and Diseases
Increased temperatures make coffee plants more vulnerable to the coffee rust fungus and the coffee berry borer insect.

Precipitation
Changes in precipitation cycles due to climate change adversely affect the growth of coffee berries.

Natural Disasters
Extreme weather events, such as hurricanes and El Niño, are more frequent because of global climate change. These events destroy or severely damage coffee plants.

Climate Change and Coffee Farmer Vulnerability

Coffee Farmer Poverty
Many farmers of small coffee plantations live in poverty due to market forces and variability in crop production.

Increased Vulnerability
Climate change decreases the production and quality of coffee berries, which reduces farmers’ incomes, making it difficult for farmers to pay back loans and cope with climate disasters.

Conclusions
Climate change adversely affects coffee yield and quality in Latin America.

Climate change increases small coffee farmers’ risk of poverty and their vulnerability to extreme climate events.

A variety of agricultural, market, and social adaptations are available to help farmers adjust to global climate change.

Adaptations to Climate Change

Agricultural Adaptations
Farmers can adapt to climate change through a variety of agricultural techniques, such as shade-grown farming, genetic engineering, crop diversification, and changing location.

Market Adaptations
Farmers can earn greater incomes by appealing to new markets, such as organic, Fair Trade, or bird friendly.

Social Adaptations
Social organizations, such as Fair Trade cooperatives, give farmers greater political and social power and allows them to sell their product collectively and demand fair prices.

References

Brewing Justice: Fair Trade Coffee, Sustainability, and Survival

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