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The **Coffee Crisis** in Mesoamerica

Causes and Appropriate Responses



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This document provides a summary of the latest developments with respect to the crisis caused by the outbreak of coffee rust (*Hemileia vastatrix*) in Mesoamerica, as viewed by representatives of the public and private sectors who are involved in the response to the outbreak. It also contains proposals for actions that address the immediate crisis while emphasizing permanent, long-term improvements.

Background and present situation

Coffee production is a fundamental part of the culture in both Central America and the Caribbean. From a socioeconomic standpoint, coffee is one of the most important agricultural

Summary prepared by the Regional Cooperative Program for the Technological Development and Modernization of Coffee Production (PROMECAFE) and the Inter-American Institute for Cooperation on Agriculture (IICA)

subsectors for the member countries of the Regional Cooperative Program for the Technological Development and Modernization of Coffee Production (PROMECAFE): Guatemala, El Salvador, Honduras, Costa Rica, Panama, Dominican Republic, and Jamaica. Mexico and Peru are in the process of joining PROMECAFE. The current PROMECAFE countries produce more than one-fifth of the world's high-end Arabica coffee crop, a large part of which is exported to the US.

Coffee rust first appeared in Central America in 1976, but had never affected production as severely as it did in the 2012-13 cycle. Five Central American countries have declared national emergencies in response to the serious socioeconomic repercussions of this outbreak, which have been exacerbated even more by severely depressed coffee prices. Of the total area (593,037 hectares) dedicated to coffee in the seven PROMECAFE countries plus Nicaragua during 2012-13, 55% has been affected by rust. Coffee losses have been estimated to be in excess 19% (3.5 million 60 kg bags of coffee) or USD499 million (16% of total production). Over 80% of coffee producers are smallholders who have no alternative sources of income. The displaced labor is estimated at 373,584 persons (17.2% of the total employed by the sector). Approximately 1.9 million people depend on coffee for their livelihood, including some of the region's poorest landless laborers.

The outbreak has regional and national security implications. The lost income may intensify migration pressures mainly to the US, and may



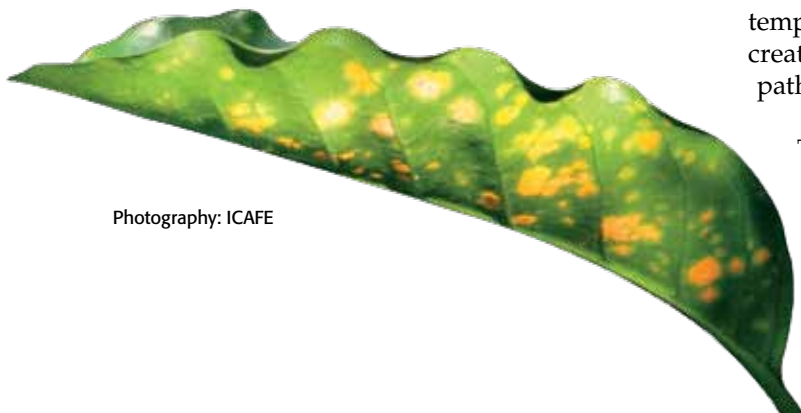
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also lead to the substitution of coffee plantations with less environmentally friendly cropping systems or even illicit crops.

Causes

Experts concur that the causes of the current rust outbreak are multifactorial and associated with poor adherence to good agronomic practices, combined with climatic events and low coffee prices. Many farmers have not invested in shade management, fertilization, monitoring, or spraying. In addition, older coffee plantations have not been renewed and some contain varieties of coffee that are highly susceptible to rust. Climatic variability and increases in average temperatures during recent years may have also created conditions favorable to outbreaks of the pathogen.

The outbreak is also the result of structural deficiencies such as inadequate agricultural policies and investment at the national level. The drastic scaling back of research



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and extension services during the structural reform programs in the 1990s resulted in less technical capacity; plant breeding programs were reduced, field monitoring and data analysis all but ceased, and the generation of knowledge needed by producers and policy makers ground to a halt. The dearth of technical assistance and on-farm training occurred at the same time that tens of thousands of small-scale producers began to produce coffee.

PROMECAFE: The regional mechanism to support coffee producers

As a result of the coffee rust epidemic of the late 1970s, the Inter-American Institute for Cooperation on Agriculture (IICA) established PROMECAFE in 1978 to develop and improve the technology needed to manage coffee leaf rust and coffee berry borer, two plant protection problems that had not been seen before in the Mesoamerican

region. The United States Agency for International Development-Regional Office for Central America and Panama (USAID-ROCAP) provided financial support. Implementation of the program was directed by IICA with the active participation of the Tropical Agricultural Research and Higher Education Center (CATIE), the International Regional Organization for Agricultural Health (OIRSA), the Agricultural Research Centre for International Development (CIRAD), the Central American countries, Mexico, Panama, and the Dominican Republic.

For over 34 years, PROMECAFE has been supported financially and administratively by IICA, and has worked with member countries and institutions on efficient production technologies, integrated pest management, and breeding programs. PROMECAFE has focused its efforts on region-wide technology transfer, training, and information dissemination, and has assisted producers in developing agribusinesses, promoting coffee quality, valuing specialty coffees, and developing sources of income diversification for small producers.



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Regional Response to the Current Crisis

Immediate Steps Taken

A Regional Plan coordinated by PROMECAFE. In response to the severity and visibility of this crisis, a large number of stakeholders in both the private and public sectors have taken steps to assess the situation, identify the most effective responses, and coordinate immediate actions.

A regional action plan was prepared by PROMECAFE with assistance from IICA. In March 2013,¹ the plan was approved by all of the national coffee institutes that comprise PROMECAFE and then by the seven ministers of agriculture of Central America and the Dominican Republic (the members of the Central American Agricultural Council-CAC). This plan served as the basis for the Coffee Rust Summit, held in April. The plan has six components:

1. Development of institutional and local capacities to manage and combat the coffee rust epidemic.
2. Integrated coffee rust management over the medium term.
3. Plant breeding research to improve or develop resistant varieties with good coffee cup quality.
4. Large-scale rehabilitation and/or renovation of old and unproductive coffee plantations.
5. A regional strategy for outreach to support the promotion of the Integrated Program

for the Combat of Rust and the Recovery of Coffee Production Capacity and the Short Term Action Plan 2013.

6. A program to support vulnerable populations such as small farmers and laborers and their families through food security and nutrition programs, generation of alternative employment opportunities, and social compensation measures.

The governments of Central America and the Dominican Republic are committed to implementing the Regional Plan, although the financial resources currently available are insufficient. It is absolutely necessary to secure additional funding and execute it in an organized way.

The First International Coffee Rust Summit. Sponsored and co-organized by World Coffee Research (WCR), PROMECAFE and the Guatemalan coffee organization ANACAFE was one of the activities under the Regional Plan. It was held on April 17-20 in Guatemala City.² At the summit, representatives of the public and private sectors identified short-term, emergency interventions. One of the main outcomes was the agreement to establish an Emergency Rust Response Coordinator position in IICA/PROMECAFE's offices in Guatemala. The stakeholders validated the critical medium- and longer-term strategies highlighted in the PROMECAFE plan approved by the CAC. The main measures approved are production/distribution of resistant planting material, plantation renovation, establishment of a pest monitoring and early warning system, and development of rust-resistant coffee varieties. They also agreed to increase regional investment in coffee research and capacity building, to

1. http://www.promecafe.org/portal/images/stories/Plan_de_Accin_Medidas_Inmediatas__para_el_combare_de_la_Roya_de_Caf__2013_.pdf
2. PROMECAFE: www.promecafe.org; World Coffee Research: www.worldcoffeeresearch.org

establish/strengthen extension services, and to conduct a comprehensive analysis of the future role of coffee production versus other crops that may offer greater market potential.

Medium- and Long-term Responses

As highlighted in the PROMECAFE Plan, large-scale fungicide application programs are the primary tool to suppress new outbreaks of rust in the short term. These are underway and being conducted by OIRSA, the national coffee institutes, the national agricultural ministries and private producers.

In the medium and long term, however, merely spraying is not a viable solution to this crisis. A combination of plantation renewals, better agronomic management, improved fertilization practices, as well as monitoring and appropriately timed fungicide applications, are required. These activities can be led by a strong private sector with the involvement of the national coffee institutes and ministries of agriculture. An assessment of available genetic material and the region's capacity to produce certified rust tolerant seeds is being conducted by PROMECAFE and CATIE. Phytosanitary campaigns, training and technical assistance for producers are being carried out jointly by public and private stakeholders.

Other key activities in implementation are:

- Radio communication programs on rust management, produced by PROMECAFE and IICA.
- A public awareness program spearheaded by OIRSA with the ministries of agriculture of the region.
- National training events for technicians and coffee producers, conducted by CATIE and PROMECAFE.
- A scientific publication with updated information about the disease, published by CIRAD.
- Employment and food aid programs for the most vulnerable groups are being implemented by relief organizations such as the World Food Programme (WFP), the Programa Regional de Seguridad Alimentaria y Nutricional para Centroamérica (PRESANCA), the United Nations Food and Agriculture Organisation (FAO), the Regional Unit for Technical Assistance (RUTA), and others.

As a long-term strategy, coffee will have to be replaced in certain areas (especially lower elevations) with economically viable crops. For this to be effective, institutional strengthening and enhanced investment in research and



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capacity development are needed, as well as the promotion and implementation of crop diversification schemes.

The Role of IICA and PROMECAFE

The coordination of responses by the public and private sectors, as well as international technical cooperation agencies is essential for the regional strategy to be effective. Despite the interest and commitment of many stakeholders, a culture of effective coordination as well as necessary logistical abilities are lacking in many countries. Whenever possible, donors must work through existing institutions and regional mechanisms, in order to strengthen them and align resources more effectively. It is important not to undermine existing institutional arrangements, but rather to assist them to meet the challenge.

Understanding the challenge, IICA and PROMECAFE are working with national and international partners to coordinate and facilitate communication among all interested parties. This cooperation will continue along with many other stakeholders to ensure a coordinated and comprehensive response. PROMECAFE will continue to coordinate regional activities and the development of scientific and technological alternatives, including regional and international symposiums and information exchanges. PROMECAFE will respond to the coffee rust problem without losing sight of the many other pressing problems that affect the coffee sector.

IICA remains fully committed to supporting not only the emergency response to the coffee rust crisis, and addressing mid-term solutions, but also

helping to find solutions to some of the long-term systemic problems, such as seeking alternate crop solutions where appropriate. Clearly, securing additional funding will be necessary to make the required changes.

IICA intends to carry out the following activities in support of PROMECAFE and regional actions:

- The Institute will continue to support and strengthen PROMECAFE's operations administratively, financially, and technically.
- IICA will provide supervision, office facilities in Guatemala, financial and logistical support for the Regional Coordinator of the emergency response to coordinate and facilitate the work of the many stakeholders involved at the local, national, regional, and international levels.³ The position will be financed by USAID through the Regional Food Security Policy Effectiveness and Sustainable Agriculture Program, with RUTA as the technical executor.
- Working closely with CATIE and PROMECAFE, IICA will promote the continuous flow of information by developing and maintaining a publically available database and inventory of all actions occurring at the regional and national levels, especially the activities of the ministries of agriculture, national coffee institutes, and private sector. This will afford all stakeholders access to up-to-date information. Highlights and key results will be sent out periodically. A communications/ information specialist needs to be contracted for several months to construct and launch the system.
- Capitalizing on its existing programs and strengths, over the medium and long term

3. http://www.promecafe.org/portal/index.php?option=com_content&view=article&id=57&Itemid=122

the Institute will respond to the crisis in coffee by strengthening national and regional institutional capacities in areas such as territorial development, business development, and the strengthening of research, outreach, and monitoring systems.

- Collaborating with representatives from academic institutions, NGOs, and the private sector, IICA will work with the CAC and the public sector to facilitate the design of improved public policies for the coffee sector. This will include the evaluation of current policies, analysis of strengths and weaknesses, and the updating of national policies to strengthen the sector within each country.
- The Institute will facilitate horizontal cooperation among PROMECAFE and non-member countries.
- IICA will provide technical assistance to programs aiming to diversify cropping systems in order to ensure economically viable and environmentally friendly production systems in areas where growing of quality coffee will no longer be viable (e.g., in areas of lower elevation.) The Institute has vast experience on which to build and scale up successful diversification and value chain programs. This experience includes developing agroforestry systems including fruit trees, cocoa and other crops, as well as with developing value chains to improve the livelihoods of the region's farmers.
- IICA will capitalize on its physical presence in every country in the region to support specific requests for collaboration in countries that lack institutional capacity or structure. The Institute will focus on the Feed the Future countries but also on El Salvador and



Nicaragua, which have particular needs for assistance. IICA will also assist countries that are not yet members of PROMECAFE, and coordinate actions between contiguous countries such as the Dominican Republic and Haiti.

- Where there are specific requests for assistance, including in nations that are not members of PROMECAFE and lack sufficient national structures and strong institutions, such as Haiti and Nicaragua, IICA can facilitate the coordination or execution of actions to meet the needs of the States.
- Given its permanent presence in all the countries, the Institute will carry out specific control and modernization activities at the national and local levels, in coordination with other national and international stakeholders, insofar as financing is available.

With existing human and financial resources, IICA has already been actively engaged in responding strategically to the crisis and has completed the hiring process for the emergency



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response coordinator, developed plans, assigned responsibilities, and obtained commitments from diverse actors.

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