

*Coffee producer and laborer income to decline for a second consecutive year*

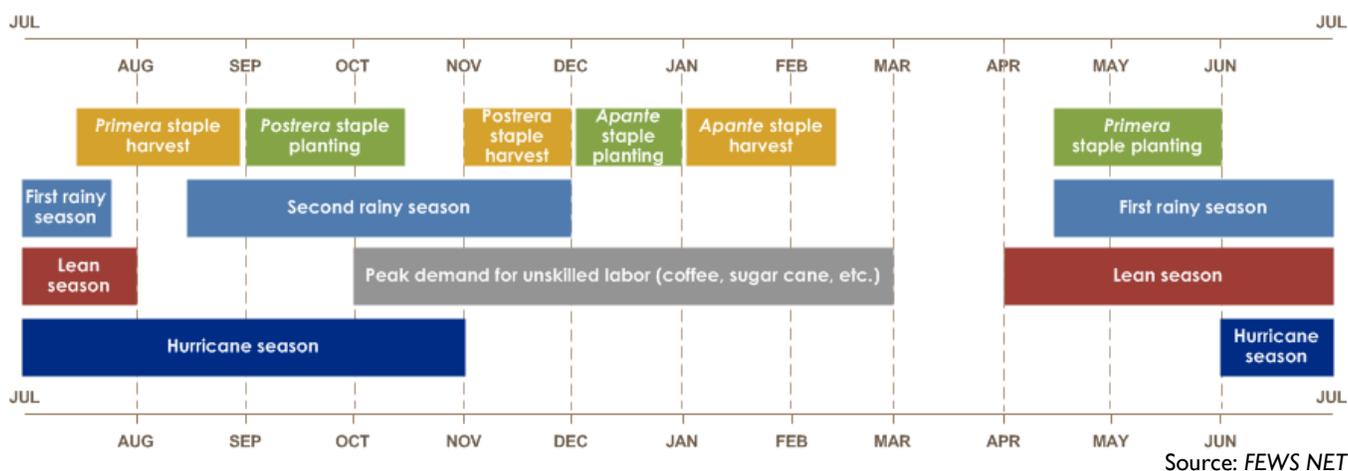
**KEY MESSAGES**

- Poor households in the highlands of Guatemala and in southern Honduras are resorting to atypical, negative coping strategies as a second consecutive year of reduced coffee harvest and below-average *Primera* staple grain production limit their income and food stocks. These households will see Stressed (IPC Phase 2) acute food insecurity outcomes through the first half of 2014, until the onset of the *Primera* harvest. In El Salvador and Nicaragua, households will be able to meet food needs by accessing other sources of income, therefore maintaining Minimal (IPC Phase 1) acute food insecurity. Any additional shock could result in a significant deterioration in food security.
- In Guatemala, El Salvador, Honduras, and Nicaragua, coffee production is expected to decline 16 to 32 percent during the 2013/2014 season, compared to 2011/12. In addition, global prices for Arabica coffee in key reference markets have fallen almost 60 percent since their 2011 peak.
- These two shocks, in addition to the extra maintenance costs associated with the continued coffee rust mitigation efforts, have significantly reduced profits for coffee plantation owners, especially small producers. The size of the 2014/2015 harvest will depend on the ability of producers to invest in inputs, such as fungicides, that control the spread of coffee rust.
- Producers are hiring fewer unskilled day laborers and paying lower wage rates. In Honduras, Nicaragua, and Guatemala, wages have dropped 14 to 22 percent over the last year. In all four countries, labor demand has declined by 16 to 32 percent compared to 2011/12. As a result, poor households dependent on daily unskilled labor opportunities in the coffee sector are expected to see coffee-related income decrease significantly.

**BACKGROUND**

Coffee is among the most important agricultural commodities produced in Central America. Honduras, Guatemala, El Salvador, Costa Rica, Panama, the Dominican Republic, and Jamaica are all part of PROMECAFE (Regional Cooperative Program for the Technological Development and Modernization) and jointly produce approximately 20 percent of the world's exported coffee. At the country level, particularly for poor households in El Salvador, Honduras, Nicaragua and Guatemala, coffee labor is a key source of income. According to PROMECAFE, in these countries, the sector employs about 1.8 million people per year. These revenues are particularly important in remote areas, where opportunities for livelihood and crop diversification tend to be scarce.

Up to 70 percent of the unskilled labor employed by the coffee sector is used during the five-month October to February coffee harvest, coinciding with the peak of the unskilled labor demand throughout the region (Figure 1); the remaining 30 percent is employed for maintenance activities during the rest of the year. Seasonal revenues from coffee harvesting are a significant source of income for poor households in these countries, driving seasonal migrant-labor flows, both within coffee-producing countries and across borders to the areas offering the highest wages (i.e., Honduras, El Salvador and Mexico). Day laborers are paid "piece-rate" wages (by volume or weight of coffee cherries harvested) rather than by hour or day of work. Small-scale producers, who account for approximately 70 percent of the coffee producers in the four countries, are another population significantly affected by the coffee rust outbreak.

**Figure 1.** Central America seasonal calendar for a typical year

## COFFEE RUST SHOCK

The incidence of coffee rust, which reached epidemic proportions in 2012, has now affected countries from Mexico to Colombia. The rust affects plants by causing premature defoliation and reduced photosynthetic capacity. Infected coffee trees produce fewer flowers than usual and, as a result, fewer and smaller coffee cherries. Coffee rust also renders plants more vulnerable to other diseases, potentially reducing productivity even further.

The current epidemic occurred as a result of multiple factors: atypical climate conditions, poor adherence to good agronomic practices, and steadily declining coffee prices, which reduced plantation owner incentives to invest in crop maintenance (including fungicides). Small-scale producers are particularly susceptible because of their lack of resources to combat the spread of the fungus.

During the 2012/2013 production cycle, coffee rust affected nearly 50 percent of the total coffee-producing areas of El Salvador, Guatemala, Honduras, and Nicaragua. In the current production cycle, affected areas vary from 25 to 74 percent (Table 1). (Note: Affected area refers to the existence of rust on the plantation. If even one of the plants is found with rust, the area is considered affected.)

In addition, productive areas declined on the most affected farms because of interventions to address rust, including pruning and replacement of damaged trees. Reports from national coffee institutes and Ministries of Agriculture suggest that 20 percent of Central America's productive areas will not produce coffee during the current season. These areas may require three to four years to recover.

**Table 1.** Areas affected by coffee rust at the national level (in hectares)

	TOTAL AREA (Ha)	RUST AFFECTED AREA (Ha) 2012/2013	%	RUST AFFECTED AREA (Ha) 2013/2014	%
Guatemala	276,000	163,410	59.2%	193,200	70.0%
El Salvador	152,187	112,293	73.8%	112,618	74.0%
Honduras	280,000	70,000	25.0%	70,500	25.2%
Nicaragua	125,874	46,853	37.2%	unavailable	unavailable

\*Data collected by PROMECAFE through each national coffee-related institution

According to PROMECAFE, 2012/13 coffee harvests declined by 15 to 25 percent as compared to the 2011/2012 season (prior to the presence of coffee rust). Based on national early harvest estimates, FEWS NET's March 2013 special report "[Coffee sector shocks and projected food security impacts in Central America](#)" suggested that 2013/14 harvests would be even worse, declining by 30 to 40 percent compared to 2011/12.

As of early 2014, information suggests that production losses for the 2013/2014 season are not as extensive as originally forecast. Expected losses due to rust in the current season (harvest ending in February) have been revised and are now anticipated to be 6 percent in Guatemala, 20 percent in El Salvador, 15 percent in Honduras, and 20 percent in Nicaragua. In Honduras, yields are expected to increase by 10 percent compared to the previous cycle 2012/2013, due to a combination of rust-control efforts and the maturation of new coffee plantations. However, production there, as in the other countries, will remain lower than 2011/2012 (Figure 2).

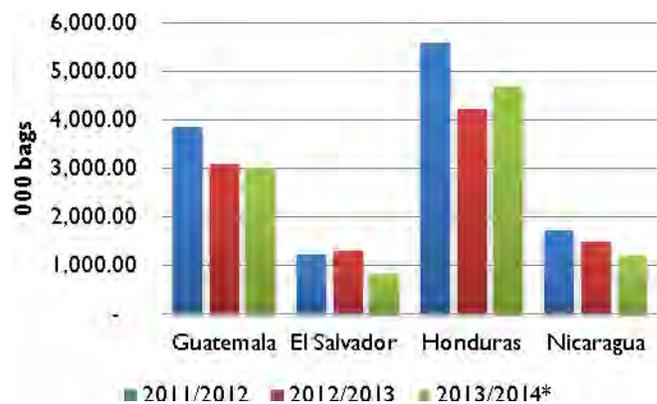
The incidence of rust, calculated as the percentage of a tree's leaves with rust, remains high, ranging from 20 to 50 percent in Guatemala, El Salvador, Honduras, and Nicaragua. The size of the 2014/2015 harvest will depend on the ability of producers to invest in inputs that control the spread of coffee rust. These extra maintenance costs, alongside declining global coffee prices, have significantly reduced profits for coffee plantation owners, especially small producers.

**RECENT COFFEE PRICE TRENDS**

Guatemala, Honduras, El Salvador, and Nicaragua export approximately 90 percent of their annual coffee harvest production, primarily Arabica. Given the region's reliance on this variety, producers are vulnerable to price fluctuations in global Arabica coffee prices, which have decreased by almost 60 percent since their high in April 2011 (Figure 4). The New York prices for "Other Arabica Milds", a more precise reference price for Central America, averaged US\$1.23/pound in November 2013, the lowest price since early 2009. Declining world coffee prices are attributed to expanded production, especially in Brazil, Vietnam, and Colombia. The increased output in these countries compensated for reduced output in Mexico and Central America and maintained global coffee supply levels. As of December 2013, global production for 2013/2014 is now forecast at 150.5 million bags, down by just 2.8 million (1.8 percent) from the previous year. The International Coffee Organization (ICO) reports indicate that 2013/14 global coffee stocks are forecast to rise in key coffee-exporting countries, mainly Vietnam, while consumption is expected to remain stable. This could push global prices down further. As of early February 2014, reports suggest possible production losses in Brazil if the present drought continues, with a potential to slightly increase the price. Nonetheless, since the Central American harvest is almost over, these variations will not significantly affect current revenues.

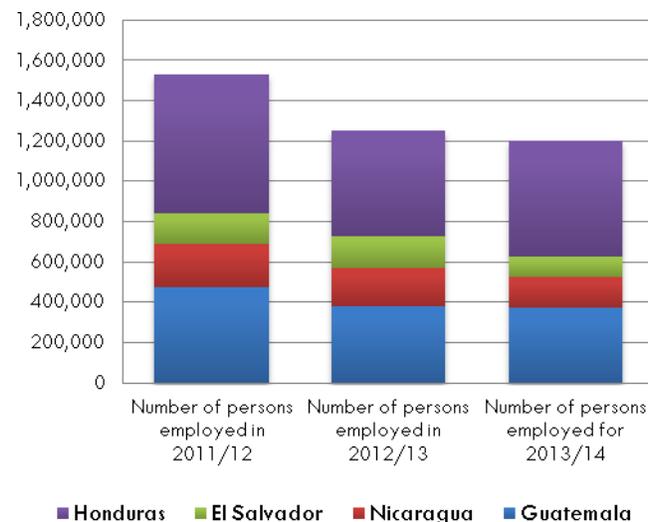
As a result of declining export prices, the Central American coffee sector is now faced with another problem: production costs may eventually exceed revenues. This has implications for the future of the regional coffee sector. As a consequence of global surpluses, prices paid to growers are declining rapidly, mainly in Guatemala and Honduras. They range from US\$1 to US\$1.23/pound of green coffee. With production costs in the region ranging from about US\$0.80 to US\$1.20/pound, along with average to above-average maintenance costs depending on traditional versus organic production, plantation owners can expect to see minimum profits or even losses this season.

**Figure 2.** Coffee production yields (000 bags of 60 Kg) from 2011/2012 to 2013/2014 harvests

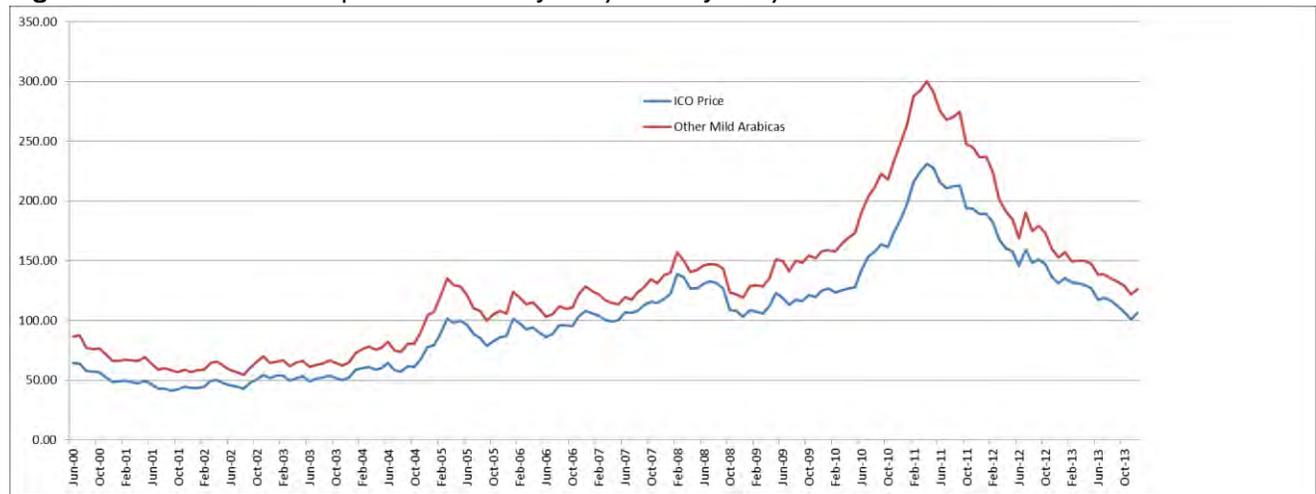


Source: PROMECAFE  
 \* Initial production estimate. Data up to December 2013, except for Nicaragua to November 2013

**Figure 3.** Daily unskilled labor opportunities in the coffee sector by year



Source: FEWS NET with data from PROMECAFE

**Figure 4.** International coffee price trends from January 2000 – January 2014

Source: International Coffee Organization (ICO)

## IMPACTS ON COFFEE-SECTOR INCOME

The current decline in global coffee prices is reminiscent of the coffee price shock of 2001-2003, when prices fell by 40 percent during 2000 to their lowest level in more than 30 years (ranging from US\$42 to US\$55/pound). Global coffee prices fell below the cost of production at that time (between US\$0.35 and US\$0.55/pound) in Central America, leading to significant and widespread loss of income from coffee sales and on-farm labor. The World Bank forecasts global coffee prices to remain relatively low in the upcoming years, but still above current estimated production costs for Central America. The price increase in January 2014 will not provide better revenues to the households since the harvest is almost finished. In the case of the organized small coffee producers, it is likely they will wait to sell their product in order to get better prices, therefore improving their income. This will not be the case for small producers who do not belong to any organization; they will sell immediately after the harvest as they have no storage capacity. Nonetheless, normal increases to living costs may increase production costs, and exceptional circumstances, such as the current rust epidemic, will reduce producers' ability to overcome them.

The income of coffee laborers will also be significantly affected, even though coffee crop losses in 2013/14 are not as large as initially expected. Coffee-related household incomes are expected to decline up to 30 percent, driven by three factors:

- FEWS NET estimates that during the 2013/2014 harvest, daily unskilled labor opportunities will decrease 16 to 32 percent compared to 2011/2012. This percentage could be slightly lower because 30 percent of the individuals employed in the coffee sector are year-round workers (known as "permanent workers"), a group that producers are less likely to compromise in order to reduce costs. The remaining 70 percent, who will be most affected, are the temporary migrant day laborers who work only during the harvest period.
- Due to the decline in global prices and the subsequent reduction in producer profit margins, plantation owners are expected to reduce the rate paid to day laborers over the remainder of this harvest season (February 2014). About 30 percent of production costs are attributed to unskilled labor expenses.
- Lower quality, smaller cherries take the same amount of time to harvest but yield a lower volume or weight harvested per day of work. Because workers are paid by weight, this will further depress incomes.

Poor households may be less likely to seek day labor opportunities in the coffee sector. Reports from Action Against Hunger (ACF) in Nicaragua and the World Food Programme (WFP) in Honduras and Guatemala indicate that the income of coffee day laborers ranges between US\$0.88 and US\$0.99 per day, an income that takes into account all household sources in a

year. This represents a decline of 14 percent in Honduras and between 13 and 27 percent in Nicaragua over the course of 2013. A similar situation is occurring in Guatemala.

## NATIONAL/REGIONAL RESPONSES

### *Agricultural Responses*

Growing rust-tolerant varieties of coffee plants is a one significant way to prevent coffee rust. However, this requires both a substantial up-front investment and a period of time with no production, which most small producers cannot afford. Options for treating the current epidemic are, therefore, limited to effective plantation management: in particular, cutting off affected branches and pruning, and applying fungicide. In February 2013, PROMECAFE and OIRSA recommended that all Central American countries declare a national state of emergency as a result of the socioeconomic repercussions from this outbreak and the exacerbating decline in coffee prices. Guatemala, Honduras, and Costa Rica have all declared emergencies; neighboring countries have yet to follow suit despite continuous requests from coffee plantation owners and organizations advocating for affected populations.

National level responses to this epidemic include:

- **Guatemala:**
  - Programs to provide fungicide, training, and sensitization campaigns to create awareness of the disease and its impact.
  - Research on climate fluctuations and an investment in a national monitoring and forecasting system to detect rust incidence.
- **El Salvador**
  - Programs to provide fungicide as well as foliar fertilizer, training, and technical assistance.
- **Honduras**
  - A national program focusing on training, awareness campaigns, evaluations, and validations of chemical products to reduce rust, and technical assistance.
  - Delivery of rust-tolerant varieties to producers
- **Nicaragua**
  - Programs to train experts and producers to treat the spread of rust, national and local phytosanitary monitoring, and awareness campaigns.
  - Creation of maps related to coffee production, location of plantations and producers, and identification of different plant varieties for production, in order to strengthen national governmental institutions.

Central America organic producers have a reduced level of response to the rust outbreak as they have limited options on the fungicides to be used; however, the organic coffee market represents an insignificant portion of the coffee production in the region. Therefore, reduced production in that sub-sector is not expected to have a critical impact on labor demand or coffee harvest labor income.

[Regional responses](#), coordinated by PROMECAFE, include efforts by a large number of stakeholders in both the international public and private sectors. The initial response prepared by PROMECAFE, with assistance from IICA (Inter-American Institute for Cooperation on Agriculture) and other international organizations<sup>1</sup> in March 2013 was an action plan entitled “Integrated Program to Combat Coffee Rust and Recover Coffee Production Capacity in Central America and the Short Term Action Plan 2013.” The plan was approved by all national coffee institutes and their respective Ministries of

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<sup>1</sup> CATIE: Tropical Agriculture Research and Higher Education Center; CIRAD: Agricultural Research for Development; WFP: United Nations World Food Programme; FAO: Food and Agriculture Organization of the United Nations; RUTA: Regional Unit for the Sustainable Development; PRESANCA: Central American Food Security and Nutrition Regional Program; CEPAL: United Nations Economic Commission for Latin America and the Caribbean; BCIE: Central American Bank for Economic Integration; OIRSA: International Regional Organism for Plant and Animal Health; IDB: Inter-American Development Bank.

Agriculture in Central America and the Dominican Republic (all members of the Central American Agricultural Council—CAC). The plan, which includes immediate and medium-term activities, will be updated during the first quarter of 2014. The main components are:

- Integrated coffee rust management over the medium-term
- Plant-breeding research to improve or develop rust-resistant varieties while maintaining high quality for the end consumer
- Development of institutional and local capacities to manage and combat the coffee rust epidemic
- A program to support populations vulnerable to this shock, such as small producers and laborers, and their respective households, through food security and nutrition programs, the generation of alternative employment opportunities, and social compensation measures

Medium to long-term, national and regional programs promoted in the PROMECAFE plan center on large-scale fungicide application to minimize new rust outbreaks. These are underway and being conducted by OIRSA, the national coffee institutes, the national Ministries of Agriculture, and private producers. PROMECAFE indicates that in the long-term, a combination of plantation renewal, better agronomic management, improved fertilization practices, monitoring, and appropriately timed fungicide applications are all needed. Additionally, a research study to develop more and improved coffee rust-resistant varieties would better equip the region to ensure future production levels.

As part of the collaborative partnership established with Sustainable Agriculture Program (RUTA/USAID), the Trilateral Commission of Trifinio Plan (CTPT) and the Hanns R. Neumann Stiftung have been providing technical assistance for the strategic planning, organization, and governance to the Coffee Roundtable of the Trifinio Region (Honduras, El Salvador, and Guatemala). This Coffee Roundtable is intended to be an inter-sectorial, inter-institutional, cross-border, public-private platform, with the main objective of contributing to sustainably improving the production and business conditions of the main stakeholders of the coffee value chain in the Trifinio Region. Among other activities, the Coffee Roundtable will promote the implementation and adoption of sustainable good practices that improve the competitiveness of the coffee sector.

**Table 2.** WFP food assistance July to December 2013

	Households	Food (MT)	Estimated Value
El Salvador	10,800	2,100	\$2,350,000
Guatemala	35,000	4,600	\$4,600,000
Honduras	8,300	1,260	\$1,260,000
Nicaragua	0	0	\$0
<b>Total</b>	<b>53,300</b>	<b>7,960</b>	<b>\$7,960,000</b>

Source: WFP

### Food Security Responses

Specific responses were undertaken to support coffee sector-dependent households. WFP conducted rapid assessments in coffee rust-affected areas throughout the region and identified 53,300 poor households particularly vulnerable to the shock. As a result, from July to December 2013, WFP provided 7,960 metric tons of food assistance to these households in El Salvador, Guatemala, and Honduras (Table 2). Other organizations, such as the Regional Food Security and Nutrition Program for Central America (PRESANCA) and the United Nations Food and Agriculture Organization (FAO) implemented employment and food assistance programs. Local organizations and churches also delivered food and in-kind assistance throughout 2013 in all countries. However, no records are available due to the small-scale nature of these donations.

## FOOD SECURITY IMPLICATIONS

Small-scale coffee producers in Guatemala, El Salvador, Honduras, and Nicaragua have limited sources of income beyond coffee sales, usually only sales of white maize and beans (red and black). Current World Bank estimates suggest that global coffee prices will remain low and relatively stable. Small coffee plantation owners are straining to maintain the necessary level of investment to control the spread of coffee rust. Stakeholders in the region suggest that some producers are abandoning coffee plantations or considering replacing them with more economically viable crops (especially in lower elevations). These actions may weaken local markets, stressing poor households' sources of income in the short- and long-term.

As described above, day laborers are receiving lower wages compared to a typical year. According to assessments from WFP in Honduras and ACF in Nicaragua, and a joint field visit to western Guatemala by FEWS NET, the Guatemalan Food Security Secretariat, and WFP, these factors are consistent throughout the region, and have the potential to cause the economic and food security conditions of poor households to further deteriorate.

Most poor households in Guatemala, El Salvador, Honduras, and Nicaragua are currently experiencing Minimal food security outcomes (IPC Phase 1) as a result of average and above-average staple grain production from the *Primera* (August to September) and *Postera* (November to December) seasons during 2013, respectively. Consistently low [food prices](#), generated from the high availability of stocks from above-average production in 2012 and 2013, have also kept food security outcomes Minimal, and are expected to remain stable even though prices will increase as the lean season approaches and gets underway.

The exception will be poor households in the western highlands of Guatemala and in southern Honduras (both laborers and small coffee producers) who have been affected by reduced 2012 and 2013 *Primera* harvests (due to rainfall deficits), in addition to reductions in coffee-related income. These households will experience Stressed (IPC Phase 2) acute food security outcomes through the first half of 2014, until the onset of the *Primera* harvest in July/August. The 2014 lean season will begin in February, at least two months earlier than normal. In contrast, most poor households in El Salvador and Nicaragua are unlikely to face acute food insecurity. In these areas, only localized *Primera* losses occurred and coffee-related income losses will not result in emergency needs on their own. It should be noted that in all four countries covered by FEWS NET, small groups of households outside of the key areas highlighted above who are heavily dependent on coffee-related income could experience Stressed (IPC Phase 2) acute food insecurity between now and June/July 2014.

Food security outcomes beyond June/July 2014 are highly dependent on the upcoming *Primera* and *Postera* seasons, as well as the progression of global coffee prices. While coffee yields are also important, they are expected to remain low for the coming three to four years due to rust damage. Consequently, coffee sector-dependent households will likely rely more than usual on staple grain production as a key source of access to food and will be more vulnerable to price shocks. Households in Guatemala and Honduras continue to be of particular concern, given their crop losses from the past two years, populations larger than those than in neighboring countries, and a higher proportion of households dependent on the coffee sector.