

## 8. Short-term impacts of COVID-19 in rural Guatemala: Call for a closer, continuous look at the food security and nutritional patterns of vulnerable families

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In early 2020, Guatemala reacted swiftly to the unfolding COVID-19 pandemic. It was one of the first countries in Latin America to impose strict measures to contain the spread of infection, including travel restrictions and a six-month nationwide lockdown beginning March 21 (eight days after its first reported case), comprising a temporary halt of activities in the private and public sectors, suspension of public transportation, and mobility restrictions, with a strict curfew from 6 p.m. to 5 a.m. According to the Oxford COVID-19 Government Response Tracker ([OxCGRT](#)), the country's measures were among the top five in Latin America in terms of stringency.

In a country where, according to pre-pandemic statistics, nearly 6 out of 10 people live in poverty and half of children under 5 are stunted, the economic and social consequences of COVID-19 and corresponding control measures deserve close attention. Moreover, Guatemala's existing structural inequalities along cultural and geographic lines, institutional and public service deficiencies, and vulnerability to climate shocks (as shown by the devastating Eta and Iota hurricanes in November 2020), all fan the flames of this crisis and call for continuous monitoring and rapid and innovative responses.

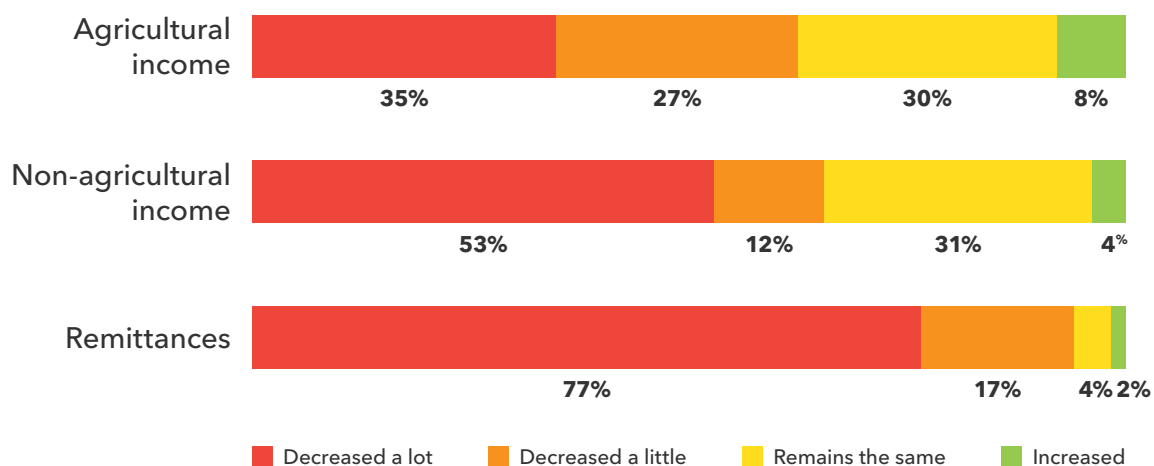
Our [recent study](#) closely examines the short-term effects of the COVID-19 lockdown on food security and nutrition among rural households in Guatemala's Western Highlands – possibly the country's most vulnerable region, with the highest poverty and stunting rates and characterized by smallholder farming, low agricultural productivity, and reduced market access. The results indicate that incomes fell, food insecurity doubled, and dietary diversity declined.

The analysis relies on a comprehensive panel dataset of 1,824 small agricultural households located in the departments of Huehuetenango, Quiché, and San Marcos, collected pre- and post-lockdown during November–December 2019 and May–June 2020. Post-lockdown data gathering was conducted exclusively by phone, using numbers collected during the first round, and relying on community leaders to contact households that did not answer repeated phone calls, as some of them had lost or changed their numbers (a common practice in rural Guatemala).

### Key findings

The lockdown's direct economic consequences are evident at first glance: Almost two-thirds of the interviewed households reported a decrease in agricultural and non-agricultural income (the latter

**FIGURE 1** Reported changes in income sources in Guatemala’s Western Highlands



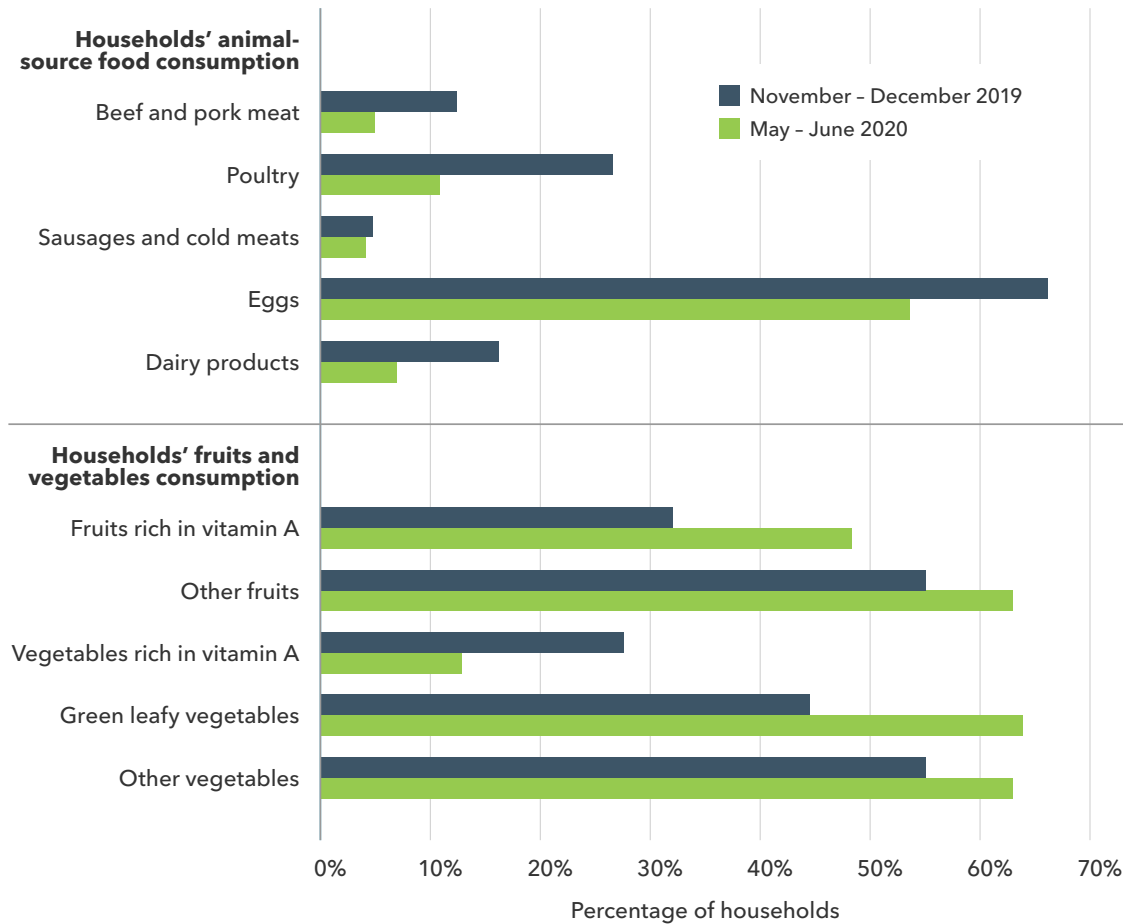
being sharper), while the large majority (94 percent) reported decreased receipt of remittances, consistent with national reports during the first months after the outbreak. In aggregate, roughly three out of every four households reported an unambiguous decrease in income (Figure 1).

Despite the relatively quick rollout of government support programs, the study finds that poor households mostly relied on limited coping mechanisms to deal with these income reductions. This, together with reported reduced food availability and higher food prices in local markets (a result of disruptions in trade and logistics and labor shortages, despite the agriculture sector’s official exemption from lockdown restrictions), appears to have reduced households’ food security and dietary diversity.

The prevalence of food insecurity roughly doubled between the end of 2019 and mid-2020, the survey indicates. This pattern was observed consistently across all forms of food insecurity: mild (having eaten only a few kinds of foods because of a lack of money or other resources), moderate (having eaten less than they thought they should), and severe (not having eaten despite feeling hungry).

In addition, households’ dietary diversity fell overall, as indicated by a small but statistically significant decrease from 6.9 to 6.4 in the Household Dietary Diversity Score (HDSS), defined as the number of food groups consumed – ranging from 0 to 12 – in the 24 hours preceding the interview. Households seemed to switch away from consumption of animal-source foods toward greater consumption of fruits and vegetables, with no significant changes observed in other food groups, such as cereals and grains or legumes and nuts (Figure 2). Unfortunately, the data did not permit us to determine net changes in nutrient intake brought about by this dietary switch, as quantities consumed were not collected during the surveys.

**FIGURE 2** Household consumption before and after COVID-19



At the individual level, dietary diversity among women ages 15–49 remained unchanged at around 4.5 (on a range of 0–9 food groups) and increased among children ages 6–23 months from 3.3 to 3.9 (on a range of 0–7 food groups). This points toward potential changes in intrahousehold allocation of foods in response to a shock, where young children may have been prioritized.

Interestingly, the study indicates that higher-income households reduced their dietary diversity more than lower-income ones, and were also more prone to report a decrease in income. The lockdown may thus have had relatively greater impacts on higher-income versus lower-income households, which tend to depend more on subsistence farming and other small-scale, locally oriented activities less affected by the restrictions. Nonetheless, the latter could still have been worse off in absolute terms, and exhibit additional vulnerabilities along several dimensions – acute malnutrition, for example, more than doubled in Guatemala over the months after the start of the pandemic compared to same period in 2019. Households located in communities that imposed additional access restrictions during the lockdown (over 75 percent of those sampled) also showed a larger decrease in their dietary diversity compared with those in communities that did not.

## Policy responses and looking forward

Starting in April 2020, the government of Guatemala scaled up programs to contain the negative effects of the crisis on livelihoods and food security. These included greater support for micro, small, and medium enterprises, subsidies for public services, and price controls on foods included in the basic food basket. Two COVID-19 programs provide direct assistance to vulnerable rural and urban families: the Programa de Apoyo Alimentario (Food Support Program) distributes rations, prioritizing the procurement of basic grains from smallholder farmers; the Bono Familia provides an emergency supplementary monthly income of around US\$130. Despite these efforts, the study shows the assistance may not be reaching many of its intended recipients. While 6 out of every 10 communities received some form of public or private aid (as reported by community leaders), only 2 out of every 10 households reported receiving aid. This suggests the need to intensify efforts to reach a larger share of rural households affected by COVID-19.

Overall, the study suggests a complex array of impacts from the COVID-19 pandemic and related control measures in the nutritionally compromised context of Guatemala's Western Highlands – including decreases in household food security and overall dietary diversity following reported reductions in income, price increases, and lower food availability at local markets. While the pandemic impacts continue to evolve and present ongoing challenges, our findings call for a closer and continuous look at the conditions rural families in the region face, together with their responses. A second follow-up survey implemented in May–June 2021, which is part of an ongoing study, indicates that the pandemic has continued to affect the incomes, food security, and dietary patterns of surveyed households. Despite slight improvements across most dimensions compared to the 2020 survey, study households still report lower agricultural and non-agricultural income and remittances, more food insecurity experiences, and a decrease in dietary diversity compared to pre-pandemic levels. Similarly, given the prolonged nature of the COVID-19 pandemic, households reporting an unambiguous income decrease have shifted to more costly coping mechanisms (toward borrowing and away from using savings or relying on friends and relatives). Moreover, households that reported a decrease in income and dietary diversity in 2020 were found to be more prone to report a decrease in 2021, pointing to persisting economic and nutritional effects of the pandemic on specific population groups. A third, follow-up survey in 2022 will permit us to assess longer-term variations on food security and nutritional patterns.

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The [paper discussed here](#) is part of a COVID-19 [special issue of Agricultural Economics](#) edited by IFPRI's Johan Swinnen and Rob Vos. The study was funded by the U.S. Agency for International Development (USAID).

Originally published May 13, 2021, and updated January 4, 2022.