



USAID
FROM THE AMERICAN PEOPLE

HONDURAS

CLIMATE CHANGE, FOOD SECURITY, AND MIGRATION

CONTEXT

Migration from Honduras has become less dominated by urban centers in recent years, possibly due to drought and lower coffee prices, and approximately one-third of returned migrants work in the agricultural sector. USAID and its Monitoring and Evaluation Support for Collaborative Learning and Adapting (MESCLA) Activity hypothesized that this trend might be due to environmental factors and that slow-onset weather patterns, such as drought, and extreme weather events, such as hurricanes, were generating more migration. However, scholars are increasingly putting forth the counter-intuitive hypothesis that these sorts of events may reduce mobility or that effects may not be simple and one-dimensional (eg, Cattaneo, et al. 2019; Riosmena, et al. 2018; Suckall et al. 2017). This brief presents topline findings from MESCLA's attempts to validate these hypotheses in the Honduran context.



Photo: USAID/Honduras



Photo: USAID/Honduras

More rural municipalities and those with higher shares of workers in agriculture historically have lower migration rates in Honduras compared to less agricultural municipalities. This is still the case, as Honduran migrants are less likely to come from more rural municipalities. Municipalities with 10% more workers in the agricultural sector were predicted to have had 33 fewer migrants per 100,000 returned from abroad from 2017 through 2020 as a share of population.¹ Source: INE, DHS/CBP, FAO, analysis by MESCLA.

However, the high urban, high migration relationship has become less clear in recent years.

From 2017 through 2020, the average annual increase in the number of migrants returned as a share of municipal population was almost twice as high for the most rural municipalities compared to the least rural municipalities (26% vs 13%).² And in MESCLA's 2021 National Victimization Security and Migration (NVSM) survey, a higher share of rural residents (43%) than urban dwellers (37%) reported intentions to migrate.



Photo: Tegucigalpa, Honduras, by Matthew Karsten

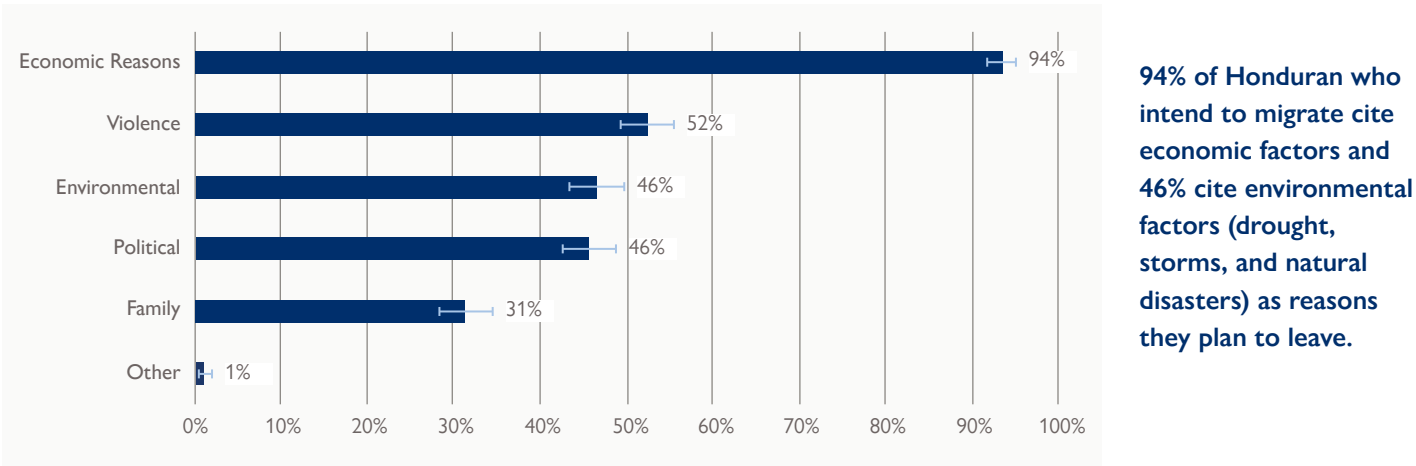
While violence levels across the country have decreased in the last five years, issues that affect the agricultural sector, including low coffee prices and drought, have become increasingly pressing, which may partially explain the recent disproportionate increase in migration from rural areas. Source: CENISS, INE, analysis by MESCLA, 2020.

A CHANGE IN DRIVERS

Forty-eight percent of Hondurans said their family experienced food insecurity in the past three months in the 2021 NVSM survey. This level of food insecurity is higher than the 44% reported in the Latin American Public Opinion Project's (LAPOP) 2018 survey and more than double the levels in the 2014 survey.

Among those who are willing to migrate to the U.S. without papers, food insecurity is a critical factor. Those who are food insecure are 33% more likely to intend to migrate than those who are not. Hondurans who are food insecure and unemployed are 376% more likely to intend to migrate than those who are food and income secure (NVSM 2021).

Reported Reasons for Intending to Migrate



Source: NVSM, 2021.

USAID SUPPORT

To overcome these challenges, USAID supports improved irrigation systems, enhances farming practices, and helps farmers better prepare for agricultural shocks through Feed the Future activities. In fact, there is some evidence that USAID interventions that aimed to sustainably reduce extreme poverty by improving governance, increasing production, and creating resilience at the household and watershed levels in western Honduras under the CDCS 2015-2020 were associated with lower intent to migrate.

When MESCLA compared 2018 Feed the Future data with 2018 Honduras Local Governance (HLG) western Honduras household survey data, the analysis revealed lower intent to migrate among USAID's Feed the Future beneficiaries than among the general population in those same departments.

| Age Group | 18 - 23 | 24 - 29 | 30 - 34 | >35 | Overall intention to migrate (weighted by age distribution) LAPOP, survey for FTF and HLG |
|----------------------|---------|---------|---------|-----|---|
| FTF Beneficiaries | 16% | 14% | 12% | 9% | 12% |
| HLG Western Honduras | 29% | 35% | 28% | 17% | 24% |
| LAPOP National level | 51% | 46% | 47% | 28% | 38% |

Source: FTF Acceso a Mercado and Alianza del Corredor Seco, 2018. Activity Databases. HLG baseline 2018, LAPOP's AmericasBarometer 2018.

DROUGHT AND MIGRATION

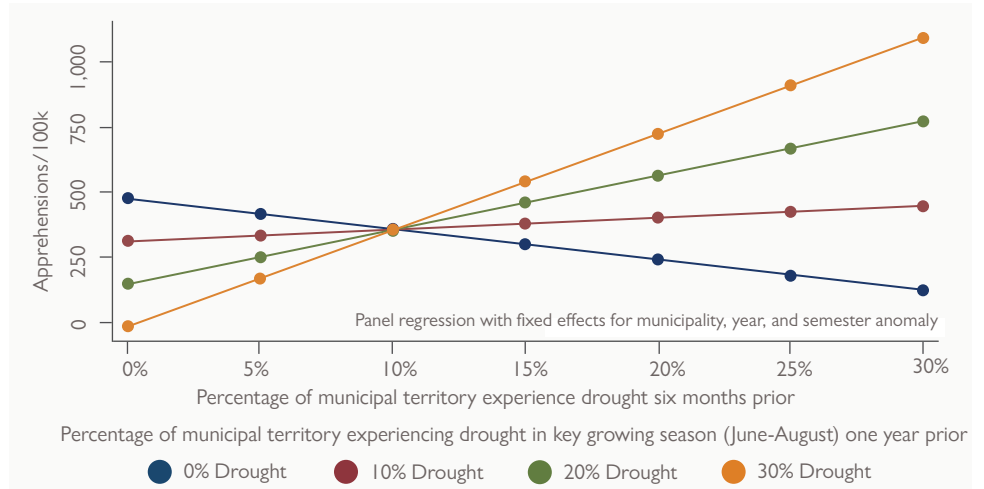
Drought and migration go hand-in-hand in Honduras. There have been consecutive droughts in Honduras's Dry Corridor from 2016-2020³, on the heels of the worst drought in 30 years, which occurred in 2015⁴. In 2018, 325,000 people suffered crop losses of 80%.

Drought has a long-term and cumulative impact on the U.S. border apprehension rate

The extent of land affected and the duration of drought interact to increase migration. For example, a drought last season followed by another this season and the following increases migration exponentially. Increases in drought predict increases in migration, even when controlling for other factors.⁵

Home-municipality drought (as measured by the FAO's Agricultural Stress Index or ASI) has a long-term and cumulative impact on the U.S. border apprehension rate.

For example, in the average Honduran municipality,⁶ a ten percentage point increase in municipal drought, sustained over five years, predicts about 90 additional apprehensions. Said another way, in a typical municipality with a population of 100,000, a ten percentage-point increase in municipal drought sustained over five years predicts about 300 additional apprehensions this year.⁷ Source: DHS/CBP, FAO, analysis by MESCLA.



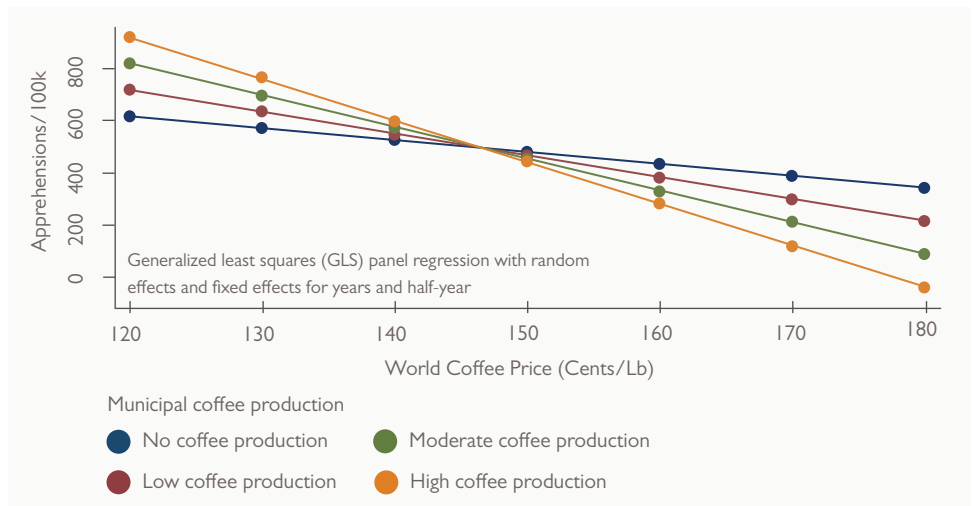
Source: DHS/CBP; Normalized Difference Vegetation Index (NDVI) avg. half-yearly and June-August maximum negative anomaly. Analysis by MESCLA.

COFFEE AND MIGRATION

Lower coffee prices predict more migration, even when controlling for other factors.⁸ Over one million Hondurans directly depend on coffee harvest. Coffee is the second largest export (first agriculture crop) in Honduras and the whole country is affected when prices decrease, such as when the prices hit historic lows in September 2018.

Source: Instituto Hondureño del Café, World Coffee Prices, analysis by MESCLA.

Coffee price drives migration most where coffee is more important to the local economy



Source: DHS/CBP; IHCAFE; US coffee futures, Mild Arabica month-ending price 2013-2019. Analysis by MESCLA.

A five cent decline in the world coffee price predicts 160 more migrants per 100,000 population.⁹ At scale, that would mean 14,400 more migrants from Honduras.¹⁰ Source: Instituto Hondureño del Café, World Coffee Prices, analysis by MESCLA.



Photo: Cultivadores de Reino Montecillos region, Honduras by: Trifecta Coffee Co.

FOOTNOTES AND METHODOLOGY DETAILS

- 1 Based on a simple bivariate regression using GOH returned migrant survey and 2013 census (INE). This relationship was no longer statistically significant in the individual years 2018, 2019, and 2021.
- 2 Analysis of GOH returned migrant survey and 2013 census, INE. We separate municipalities into four quartiles based on the percentage of economically active persons working in agriculture. The average share of workers in the fourth quartile was 86%; the average in the first quartile was 34%.
- 3 DTM/IOM/CERF 2021, Vulnerabilidad y Sequía Encuesta de Hogares.
- 4 El Nuevo Diario. 2016. "El Corredor Seco de Centroamérica ante la peor sequía de los últimos 30 años." May 15, 2016. Accessed on June 1, 2020 at: <https://www.elnuevodiario.com.ni/internacionales/centroamerica/392719-corredor-seco-centroamerica-peor-sequia-ultimos-30/>
- 5 Analysis is based on municipality-year panel regression with fixed effects for municipality and year, 2013-first half of 2019. This method holds constant municipal-level factors such as poverty level, existing migrant networks, or population as well as national, regional, or global time trends that uniformly affect all municipalities (e.g., economic or policy effects in the U.S. or Mexico; national-level political factors in Honduras; etc.)
- 6 The average municipal size in Honduras is 29,000 inhabitants.
- 7 MESCLA based its analysis on municipality-year panel regression with fixed effects for municipality and year (2013-first half of 2019). This method holds constant municipal-level factors such as poverty level, existing migrant networks, or population as well as national, regional, or global time trends that uniformly affect all municipalities (e.g., economic or policy effects in the U.S. or Mexico; national-level political factors in Honduras; etc.). Drought level is based on the FAO's Agricultural Stress Index, which shows the annual average percentage of arable land in each municipality that experienced agricultural stress during the maize growing season.
- 8 USAID research and regression analysis + explanation of fixed effects.
- 9 Coffee prices during this period of study ranged from \$1.35-1.65 per pound.
- 10 Both analyses are based on municipality-year panel regressions with fixed effects for municipality and year. These numbers are based on returned migrant data. Results are still significant based on DHS/CBP border encounters. Using both US border apprehension data (2013 through June 2019) and the Government of Honduras survey of returned migrants as indicators of emigration, we find a strong negative relationship between world coffee price and migration.