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# Crop Price Variability, Environmental Change and Intra-Regional Migration in Africa

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### Abstract

We construct exogenous price and weather shocks to the economic livelihood in West African countries and link them to migration patterns within Africa. Price shocks are variations in crop prices movements in a country that are caused by global price movements, where variation between countries stems from the fact that specialize in different crops and hence are differentially impacted by price movements of individual crops. Weather shocks are derived as variations in country five-year mean temperature and precipitation values averaged over the maize growing area and season. Our findings are consistent with a push-pull model where out-migration increases if economic livelihood declines at home or increases at the destination. Increasing crop prices, especially for cash crops, improve the economic livelihood of farmers in agricultural areas and hence decrease out-migration. At the same time, higher temperatures, which are associated with increased crop failures, non-linearly increase out-migration at origin, while linearly decreasing in-migration at destination. Our results are significant for migration flows within West Africa, where countries share a similar colonial history and are part of a common economic zone, but not significant for remaining countries.

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