Farming communities often change cropping and land-use patterns in response to several factors. Two of these factors are changes in climate conditions and increased integration into global trade networks. The relative importance of each of these factors, however, is not apparent, especially in the context of a small-scale farming system that dominates most African countries. This study presents empirical evidence to highlight the role that changes in climate conditions and crop prices play in shaping decision-making of small-scale farmers in Ethiopia. Using seven rounds of household survey data (1994-2009), we estimate augmented production functions to analyze the impacts of climate conditions and crop prices on changes in production, land allocation, and yield levels for nine crops in Ethiopia. The results of the study show that production and yield levels respond to both climate conditions and crop prices in varying degrees across crops. With few exceptions, a deviation of temperature from its mean had a negative impact on both production and yield levels of most crops, whereas a deviation of rainfall from its mean had a positive impact on some crops. An increase in both expected and actual prices had adverse effects on some of the highly valued crops (i.e., white teff and coffee), whereas a consistently strong positive impact of prices was observed only for Enset. Unlike results from previous studies, there is no evidence to support the notion that farmers move away from grains to the two major cash crops (i.e., chat and coffee) considered in this study. One implication is that both climate conditions and crop prices may have forced farmers to move away from from the crops considered in this study, perhaps to other high valued crops (i.e., oilseeds, and pulses) and fruits in a bid to diversify their crop portfolio.