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Trends in Tobacco Production and Prices in Malawi

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Key Messages

- Diversification away from tobacco production has been framed as a priority for Malawi.
- From 2004 to 2019, the share of Malawian crop farmers producing tobacco fell from 16% to 5%, and tobacco's share of the total value of crop production also declined sharply.
- In important respects, a transition away from tobacco has already occurred.
- Over this period, farm-gate prices for tobacco have declined relative to the prices of maize or fertilizer, as has the share of the export price that is received by farmers.
- Research is needed to understand why the farm-gate share of tobacco export prices has declined, and how the livelihoods of smallholder farm-households that exited tobacco production have been affected.
- Additional research should also identify the investments needed to develop viable alternatives to tobacco, including improvements in non-tobacco value chains and on-farm technologies.

Introduction

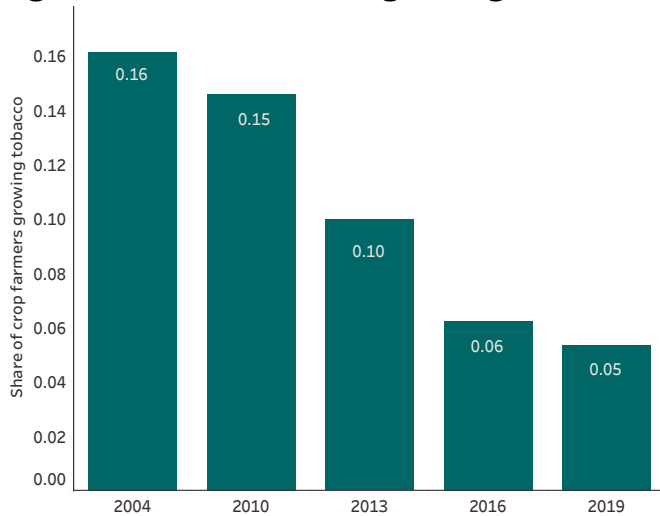
Malawi is one of the world's most tobacco-reliant countries, with tobacco historically accounting for up to 70% of foreign exchange earnings.¹ In recent years, however, tobacco markets have become increasingly unstable, translating into fluctuating and declining incomes for Malawi's farmers.² With a growing recognition that tobacco is not a sustainable commodity, the Government of Malawi has begun to prioritize diversification towards other crops.³ Nevertheless, alternative sources of income that are as profitable as tobacco for Malawian farmers—and as useful for Malawi as an export—have yet to be identified.

Although the price received for tobacco is said to be far higher than for other crops,³ almost no farmers characterize it as “lucrative”. Rather, most farmers report that they began growing tobacco

because it was the only economically viable option.⁴ Crops such as legumes require considerably more land to produce the same crop value as tobacco, a critical concern in a land scarce country. Farmers also choose to grow tobacco based on the existence of a well-structured market, as well as access to extension, credit, and inputs that are made available through production contracts.

This analysis characterizes broad trends in tobacco production in recent decades in order to understand whether or not Malawi seems to be shifting away from this crop and how production has changed over time. We further investigate whether prices for tobacco are in decline, as is widely believed. This paper draws primarily from the Malawi Integrated Household Survey (IHS), a nationally representative household data set collected in 2004, 2010, 2013, 2016, and 2019.

Figure 1. Share of farms growing tobacco



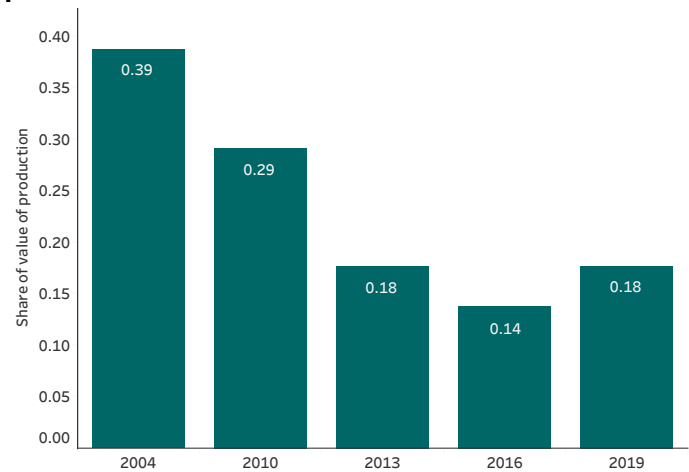
Source: IHS

Findings

From 2004 to 2019, farmers in Malawi have shifted away from tobacco production. While 16% of crop farms in 2004 produced some tobacco, this had fallen to 15% by 2010 and continued to fall to 10% in 2013, 6% in 2016, and 5% in 2019 (Figure 1). This translates into a sharp decline in the total number of tobacco farms, of which there were 385,353 in 2004 but just 177,893 in 2019. While tobacco had a presence in many districts as of 2004, production seemed to be clustered by 2019 in a smaller handful of districts, including Mzimba (in the Northern Region) and Kasungu and Lilongwe (in the Central Region). Tobacco production has almost entirely disappeared in a number of districts in which it was once grown.

Tobacco's share of the total land area under cultivation in Malawi and its share of the total value of crop production have declined over time. The share of total cultivated land that is allocated to tobacco production fell from a high of 8% in 2010 to 4.5% in 2019. Tobacco's contribution to the total value of crop production fell from 39%

Figure 2. Share of total value of crop production derived from tobacco

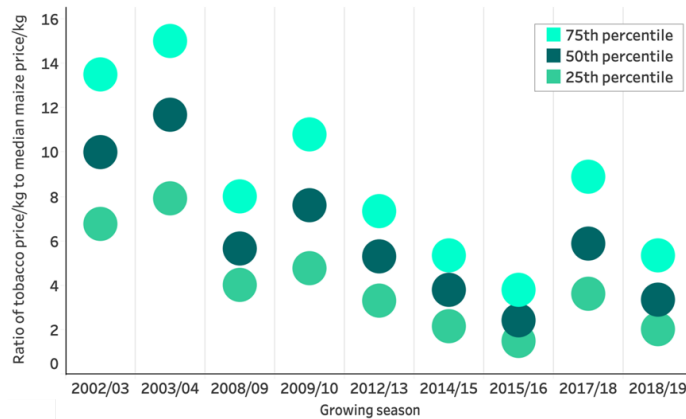


Source: IHS

in 2004 to 14% in 2016 before slightly rebounding to 18% in 2019 (Figure 2). This seems to reflect the rising importance and relative value of non-tobacco crops (even if other crops remain less valuable on a per-hectare basis). This pattern is noteworthy because the imperative to diversify away from tobacco is often cast as a looming challenge for Malawi.^{3,5} Yet, in some important respects, it seems this transition has already occurred.

Tobacco farms are generally growing larger over time. More specifically, the largest farms seem to be getting larger. In terms of quantities of tobacco produced, the farm at the 75th percentile of this distribution produced 500 kg in 2004 and 700 kg in 2019. It is possible that relatively less productive farms have exited tobacco farming in recent years, while more productive farms have remained. Nevertheless, land productivity on tobacco farms remains low, with the tobacco farm at the median level of productivity generating approximately 93,000 MWK (roughly 128 USD) in net revenue per hectare cultivated, as of 2019. Furthermore, poverty is rising among tobacco farmers, and this is occurring at a slightly faster rate than that of

Figure 3. Tobacco prices (ratio of tobacco price to median maize price)



Source: IHS

other crop farmers. Thus, between 2004 and 2016, poverty rose among non-tobacco crop farmers from 49% to 52%, while it rose among tobacco farmers by a larger amount, from 39% to 44%.

Export prices of tobacco have decreased since 2008. For Malawi’s tobacco, export prices reached their highest value of USD 4.3/kg (in real, inflation-adjusted term) in 2008, which was the peak of the global commodity price boom. Nevertheless, the export price in 2019 (USD 3.1/kg) is still higher than all prices before 2007.

Tobacco prices have declined relative to the median price for maize or the commercial price for fertilizer. When the price of tobacco is expressed relative to the price of maize or fertilizer (i.e., with maize or fertilizer as a numeraire), a downward trend is evident (Figure 3). Simple linear regressions reveal a statistically significant negative trend in the ratio of tobacco to maize prices (Coef=-0.5, P=0.000), and in the ratio of tobacco to fertilizer prices (Coef=-0.07, P=0.000). The shifting ratio of tobacco to maize prices is consistent with the manner in which tobacco’s share of crop value in Malawi has been declining faster than its share of cropland.

The share of the export price for tobacco that is received by farmers has also been declining. In 2003, a farmer receiving the median farm-gate tobacco price (the 50th percentile) received 32% of the per-kg export price for Malawian tobacco. In 2019, the median farm-gate price was 18% of the export price. A simple linear regression reveals a downward trend in the share of the export price received at the farm-gate (Coef=-0.012, P=0.000). This means that, on average, the share of the export price retained by farmers declined by 1.2 percentage points each year over this period.

Conclusion

As noted earlier, the number and share of farmers growing tobacco has been on a downward trajectory over the past 20 years, and the tobacco farmers that remain are clustered into a smaller number of districts, especially Lilongwe, Kasungu, and Dowa. Tobacco is evidently becoming less and less important as a backbone of the rural economy in most other districts. Although the need to diversify away from tobacco is often cast as a looming challenge for Malawi, it seems this transition has—in important respects—already occurred.

In addition, tobacco prices have been declining relative to the prices of other important products, including maize and fertilizer. This would make tobacco less lucrative for farmers if they are less able to use their cash earnings to purchase these key items. Furthermore, farmers seem to be receiving ever smaller shares of the auction and export prices for tobacco. Since 2004, poverty rates among tobacco farmers have risen, an indication that tobacco production is not able to serve as a pathway out of poverty.

Future research may seek to understand why tobacco production in Malawi is becoming less common, even as it remains more profitable than other crops. There is also a need to rigorously assess how declining tobacco prices (in relative terms) have affected farmers' welfare and whether farmers have suitable crop alternatives and other livelihood options. It would be gratifying to find that farmers have been exiting tobacco farming because profitable and stable alternatives have surfaced in recent years.

Nevertheless, it is likely that investments are yet needed to foster strong alternatives to tobacco. Such investments include research and development in on-farm technologies to raise agricultural productivity, as well as improvements in non-tobacco value chains to reduce transportation costs and promote private investment.

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