



## THE DIFFERENTIAL EFFECTS ON RURAL INCOME AND POVERTY DURING A DECADE OF RADICAL CHANGE IN MALAWI, 1986-97

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### Produce wealth, reduce poverty

CURRENT DEVELOPMENT POLICIES focus on poverty reduction and seek to discover how poverty is produced. Yet, these policies often fail to examine how wealth is produced. One of the poorest countries in the world, Malawi has few resources apart from its people and land. It has one of the highest population densities in Africa but not the fertile soils and bimodal or year-round rainfall that permit perennial cultivation. Yet, even the poorest families show amazing energy and creativity in trying to provide food and income for themselves.

One author has identified three periods in the policy approach of the World Bank, the most influential donor in Malawi: the “pricist and state minimalist” approach of 1981-7, the “micro-structuralist” approach of 1987-94, and the “structural transformation” of 1994-2000. A longitudinal study of rural families in one of the most densely populated areas tracked how families moved up or down in income and welfare during these periods, and why some remained at the top while others remained at the bottom. Significantly, the first year of the study (1986-7) came before the major liberalization policies affecting smallholders were in place. Subsequent studies, in 1990 and 1997, were carried out in the wake of those policies.

In addition to the study, this brief draws on Malawi’s economic and political situation over the past two decades to examine the link between poverty and wealth. By seeing who gets ahead and who falls behind under certain policies, we can begin to identify approaches that not only reduce poverty but also help families produce wealth.

### U-turns in policy pathways

In 1981, structural adjustment loans to Malawi were conditioned on reforms intended to increase smallholder production of export crops. This was to be accomplished by increasing the producer prices for export crops given by the parastatal marketing board while holding down maize prices. Subsidies on fertilizer were to be removed to reduce the government deficit. The outcome of the price changes was not an increase in aggregate production, but a shift among crops, with the increase in export crops displacing maize, the staple crop. Meanwhile, removing the fertilizer subsidy reduced the profitability of hybrid maize.

Fundamental problems faced by smallholders were not resolved by the pricist reform, and a food crisis in 1987 led to a decline in maize production per capita and a collapse in the parastatal’s ability to purchase maize. Eventually, the government introduced a new set of smallholder prices, reversing the structural adjustment conditionality. Maize producer prices were increased to above pre-reform levels and the fertilizer subsidy was reintroduced.

A new approach by the Bank in the 1990s sought to remove obstacles preventing expanded agricultural production among smallholders. This approach accepted the need to improve food crop productivity and target subsidies in order to boost production of high-yielding varieties of maize and export crops. The most revolutionary move was to allow smallholders to grow burley tobacco, formerly restricted to the estates. Burley production, a rise in hybrid maize production, and a large

increase in non-maize food crops, all fueled considerable growth in the smallholder sector. However, along with volatile climatic conditions, the shifting donor and political stances undermined the sustainability of this growth.

Indeed, by the late 1990s, the Bank ceased emphasizing the importance of maize productivity for increasing food security and targeting subsidies to promote smallholder production. Instead, it promoted export crops, especially tobacco, as the route to food security. During this time, a decline in overall maize production and sales, along with periodic droughts and floods, produced severe food deficits that forced the government to regard increased production as the way to guarantee food security. It instituted the StarterPack Program that distributed small packets of fertilizer, hybrid maize seeds and legumes to all smallholders. With the goal of ensuring household food security and avoiding a reliance on unstable markets, the government program led to a marked rise in maize production and an overall increase in smallholder growth. Donors had reservations about the program, however, especially about the goal of distribution to the entire smallholder population. The program was scaled back after 2000 to target the most needy. While these more limited programs continued to have a positive effect on maize harvests, the gains were reduced. Meanwhile, conflicting policies and differing goals made for tense relations between government and donors.

### Tracking the income gap

Despite the prevalent impression of a fairly homogeneous “smallholder sector,” our research found considerable differentiation among rural families. Families at the top and the bottom ends of the income and wealth distributions draw on the same resources and carry out the same productive activities, yet own and combine them in different proportions and with different outcomes.

In the study region in 1986-87, prior to structural adjustment, common to all families was the aim of producing as much of their staple maize as possible. “*Chimanga ndi moyo*”: maize is life. The differences were that families in the top quartile retained a larger absolute amount of maize. They also produced larger harvests, grew a larger diversity of crops, were far more likely to grow tobacco, and had higher levels of off-farm income. The poorest households had smaller landholdings, produced very small maize harvests, had a less productive range of crops, and, crucially, were extremely short of cash income despite often working long hours at poorly-remunerated casual work.

Despite the common aim of food self-sufficiency, most families in most years became net purchasers of maize. While 53% of sample households sold maize, fully 99% purchased it. Cash was particularly scarce in the food-deficit, main cultivation “hunger season” of November to January. Maize stores were considered much more protected than cash, which people saw as more fungible and open to demands from relatives, neighbors and friends. The sample households revealed a typical diversification of income. The sample average for off-farm income was 24%, remittances and gifts 15%, agricultural produce sales 30%, and home-retained maize 30%.

The larger quantities of crops sold and the higher cash income from sales achieved by the top income quartile meant that those households had a lower “subsistence ratio.” Yet, “subsistence,” understood as the value of the share of retained maize in total food expenditures, was negatively correlated with income, ranging from 46.8% for the bottom income quartile to 53.3% for the top income quartile. Those with larger landholdings, larger maize harvests, and higher cash incomes did *not* reduce the proportion of own-produced maize in their total food needs. Thus, subsistence and commercialization proved to be not two alternative orientations but interdependent strategies followed by individuals and households, best understood in relative terms. This relationship also shows that even the poorest were not outside the market, as often has been assumed.

While land is one of the most critical differentiating factors in rural areas, the distinctions between very poor and better-off families were revealed most clearly in food and income strategies. Although only 11% of the total sample maize harvest was sold, the poorest income quartile sold twice that proportion. Despite having smaller harvests to start with and fewer crops in their smaller landholdings, they were compelled to sell some of their maize because it represented one of the very few sources of cash income available.

**In the wake of change.** Since the 1986-87 survey, national statistics show increased proportions of burley tobacco and non-maize food crops in smallholder cultivation, with a consequent decline in maize hectareage. Market liberalization brought an influx of crop traders into the villages and an increase in crop marketing among most farmers, but liberalization also brought institutional confusion as donors and government shifted and backtracked on their positions, with negative effects on the production and food security strategies of farmers.

Of all the changes in smallholder economic life, the massive spread of burley tobacco production was the

most dramatic. By 1997, 80% of sample households were growing burley, though at variable scale. These figures do not represent the national picture because the original sample over-represented tobacco growers, and burley growing is possible only in certain areas; however, there are some wider benefits beyond the grower households when burley farmers spend a substantial part of their crop income in the villages.

Observers often raise the concern that burley production leads to lower maize production, thereby threatening the food security for growers who have little land and income. Individual families do indeed end up with less maize harvested than they might have had if they did not grow burley, and if harvests of both maize and burley are poor, then their overall lower cash income as well as maize stores can result in lower maize supplies for consumption. Yet, the survey data do not show any *consistent* pattern of either lower levels of maize production or consumption for those families in the bottom income quartile who grow some burley tobacco.

Meanwhile, the extremely low number (2%) of the sampled farmers growing hybrid maize in 1986-7 jumped to 52% in 1990-1. It was widely assumed that local varieties were for food and that hybrids were for cash sales. Therefore, it was thought that hybrids would be of interest only to commercially-oriented smallholders. Yet, for seriously food-deficit families a great advantage of hybrid varieties is that they mature much earlier, and the poor have responded positively to hybrid varieties when accessible.

Another mistaken notion was that commercially-oriented farmers would give up growing local varieties once they took up hybrids. This assumes an opposition between commercial and subsistence farming and between hybrids and local maize. In fact, with few exceptions, even the biggest surplus producers of maize and burley grew a great deal of local maize along with hybrid maize, both for consumption and to hire casual laborers.

Despite the attraction to farmers at all levels of access to high-yielding varieties, fertilizer, and other inputs designed to improve productivity, their uptake is severely constrained by the low level of resources among most smallholders. After the success of the government efforts in the early 1990s to provide smallholders with credit and agricultural inputs, the collapse in the credit system, combined with the Bank-supported liberalization program, reversed the trends. The programs of free or subsidized inputs of the latter 1990s and early 2000s resulted in an increase in the numbers of people growing hybrid maize, in particular among those in the bottom 50% of income

distribution. They also improved the bargaining position of the poorest, who are hired by the better-off farmers as casual laborers. If these programs are directed to *all* smallholders, though, they become extremely costly. Yet attempts to target only the poorest smallholders are difficult, often seen by the farmers as unfair, and socially disruptive.

What, then, were the main effects of market liberalization? There has been an influx of traders at harvest time in the sample villages, which has meant that crop sellers sometimes benefit from more competition among buyers, yet the consequences for consumer purchases in the deficit season are not positive since traders have not been able to provide the supplies needed. The assumption that a private market would jump into the space vacated by the parastatal proved unrealistic. In addition, the overall maize situation reveals an intensified pressure on the poorest families. An already high percentage of total expenditures was spent on maize by poor families prior to the policy changes, and this percentage increased after structural adjustment when food prices rose faster than revenues (see table).

Consequently, many farmers were again producing and retaining as much maize as possible and purchasing as much of what they need beyond their own production as close to harvest as possible. Reflecting people's increased sense of risk, such strategies are, unfortunately, beyond the abilities of the poorest families.

**Changes in income and relative poverty.** For the sample as a whole, between 1986 and 1997, incomes (proxied on expenditures) rose by 59%. There was a drop of 8% between 1986 and 1990 and an increase of 72% between 1990 and 1997. The drop is explained by the

<b>Expenditures on food (% of budget)</b>			
	<b>Year</b>	<b>Maize</b>	<b>Other</b>
<b>Total Sample</b>	1986	20.0	26.0
	1991	22.0	22.0
	1997	19.5	19.6
<b>Expenditure Quartile 1 (Lowest)</b>	1986	25.0	20.0
	1991	36.0	23.0
	1997	29.5	22.0
<b>Expenditure Quartile 2</b>	1986	23.0	34.0
	1991	24.0	23.0
	1997	22.0	22.8
<b>Expenditure Quartile 3</b>	1986	19.0	25.0
	1991	19.0	23.0
	1997	19.8	19.6
<b>Expenditure Quartile 4 (Highest)</b>	1986	13.0	25.0
	1991	9.0	18.0
	1997	6.6	14.2



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detrimental effects of the first structural adjustment and liberalization programs. The increase is overwhelmingly due to the sharp rise in growers of burley tobacco.

Aggregate figures, however, mask an increasing gap between families. In 1986-7, the mean income of the top income quartile was three times that of the bottom quartile; this increased to 11 by 1997. Between 1986 and 1990, benefits from the policy changes were concentrated among the top income quartile households, with others showing a regressive pattern. Between 1990 and 1997, *all* quartiles experienced some improvement in income. Gains were much greater, however, for the top quartile. Over the total period, 1986-97, households in the bottom quartile lost ground absolutely and, even more, relative to the top quartile. This is most obvious in the increased share of expenditures going to maize by the poorest quartile.

1990-97 was marked by considerable movement for tobacco growers, with only half of the top quartile remaining there, the rest dropping. Many farmers raced into burley production without sufficient resources, and they were unable to make a consistently high income. Nonetheless, most households *not* growing tobacco were worse off over the period. Fully 73% of the lowest quartile households remained there, while over 40% of those in the next to lowest quartile fell to the bottom. In comparison, two-thirds of those in the top quartile remained there, as did half of those in the next to top quartile. This pattern reveals an increased polarization among the non-tobacco growers, which modifies the point that burley tobacco production has been a key factor of differentiation among smallholders since 1990.

### A direct pathway?

There is general agreement on what is needed for the rural majority in Malawi. As always, the problem is how to achieve these ends. The examination of how smallholders fared under the shifting periods of donor

policy since 1981 reveals potentially successful approaches. Yet, it also underscores that erratic and dogmatic donor-influenced programs can increase rather than decrease smallholder uncertainty.

One clear conclusion is the essential role of government in assuring adequate supplies of staple foods during the deficit season. In countries like Malawi, where the majority of its rural population is food-deficit, ensuring adequate, affordable food is a primary task in combating poverty. In conjunction with such needed government efforts, the hope is that donors seeking to aid the poor in sustainable production or to provide them with increased food security will be able avoid the competing and changing programs seen in Malawi and will instead implement coherent and sustained programs. In addition, combating poverty does not mean targeting all programs to the poorest.



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