# **IMPLICATIONS**

# **Prioritizing smallholder farmers**

The study underscores the critical role of smallholder farmers: they constitute the majority of Mozambique's agricultural sector, which remains largely dominated by small-scale farming. Prioritizing policies that support these farmers is essential for enhancing productivity, boosting the sector's contribution to GDP, and driving poverty reduction.

### Stable and evidence-based policies

The quality and depth of available data are crucial for assessing the strengths and weaknesses of Mozambique's agricultural sector. Reliable evidence is not just valuable but essential for guiding informed decision-making and promoting sustainable development in the sector.

#### Additional considerations

### Cash crops (outgrowers)

The analysis identified five distinct groups of smallholder farmers based on their livelihood strategies. Among them, the cash crops group consists of farmers who prioritize high-value crops, often cultivated under subcontracting arrangements within development programmes. This group consistently generates higher agricultural revenues than others, reflecting a strategy geared toward more demanding markets with guaranteed demand. Predominantly located in Mozambique's northern and central regions, these farmers account for approximately 13.5% of the smallholder population. Expanding the number of subcontracted cultivators presents a strategic opportunity for sector growth and development.

### Minimum price guarantees

Minimum price guarantees serve as a safety net for farmers, helping to stabilize incomes and mitigate market risks. In Mozambique, the cotton sector has seen relatively positive outcomes from such price guarantees. However, similar mechanisms remain largely unavailable for other crops. Expanding these policies gradually, based on evidence and sector needs, could help reduce financial uncertainty for farmers and encourage increased production.

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Mozambique's agricultural sector stands at a critical juncture. While there have been positive trends in expanding cultivated land and improving yields, persistent structural challenges remain, including low adoption of modern inputs, limited market integration, and inadequate sector funding.

To foster a more competitive, sustainable, and resilient agricultural sector, it is essential to develop policies that prioritize smallholder farmers, enhance access to modern resources, and establish economic safety nets—such as minimum price guarantees and targeted incentives.



- scaling up research and capacity

# **FACTSHEET**

Agricultural development in Mozambique 2002-2020

Trends, challenges and opportunities









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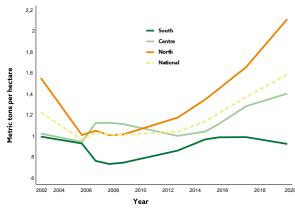
# Importance of agriculture

Agriculture is fundamental to Mozambique's national development as stated in the constitution. It is the primary source of income for over 70% of the population and contributes 23% to the country's GDP, which is significantly higher than the sub-Saharan African average. However, agricultural productivity, particularly in small-scale farming, lags neighbouring countries. For instance, maize yields in Mozambique average just 1 ton per hectare, compared to 5 tons per hectare in South Africa, 4.5–5 tons per hectare in Asian and South American countries, and 11 tons per hectare in the United States. This low productivity exacerbates poverty among those dependent on agriculture, underscoring the urgent need for enhanced agricultural efficiency and support.

### Harmonized database for the sector

The report Agricultural Development in Mozambique: Trends, Challenges, and Opportunities utilizes a new harmonized dataset compiled from 11 agricultural surveys conducted between 2002 and 2020 by Mozambique's Ministry of Agriculture and Rural Development (MADER). This comprehensive database consolidates detailed information on small-scale farmers' production, preferences, and strategies, enabling the first consistent assessment of agricultural dynamics in the country. As a result, it represents a significant innovation in understanding and addressing the sector's challenges and opportunities.

FIGURE 1 | Average output by region 2002-2020



Source: Author's elaboration based on the TIA/IAI harmonized data set.

Note: Time series are smoothed using a locally weighted scatter smoothing approach (lowess).

# **KEY TRENDS**

# Decrease in the average size of cultivated land

Between 2002 and 2020, Mozambique's **total cultivated area** expanded from 4.03 million hectares to 5.05 million hectares, driven primarily by growth in the northern and central provinces. In the North, cultivated land increased from 1.30 to 1.73 million hectares, while in the Centre, it rose from 1.93 to 2.73 million hectares. Conversely, the South experienced a decline, with smallholder-managed land shrinking from 0.80 to 0.58 million hectares—reflecting a broader shift toward alternative economic activities in the region.

During the same period, the **average cultivated area** per small farming household declined by approximately 21% nationwide. By 2020, regional averages stood at 1.2 hectares in the Centre (down from 1.6 hectares in 2002), 1.0 hectare in the North (compared to 1.2 hectares in 2002), and 0.8 hectares in the South (a sharp decline from 1.4 hectares in 2002).

## Increased yield

A key indicator of the sector's performance is yield, measured in tonnes (1,000 kg) of maize equivalent per hectare. Analysis of microdata from 2002 to 2020 reveals a steady increase in agricultural income in the North and Centre, with the North experiencing the most significant growth. In contrast, the South followed an opposing trend, recording a substantial decline in overall average income. This shift is largely attributed to the diversification of income sources, as the proportion of the population engaged in agriculture in the region dropped by 25.53% between 2005 and 2017, reflecting a broader decline in the sector's economic relevance.

However, while rising incomes suggest agricultural progress, they do not necessarily translate into improved livelihoods for smallholder farmers, given the concurrent decline in cultivated land per household.

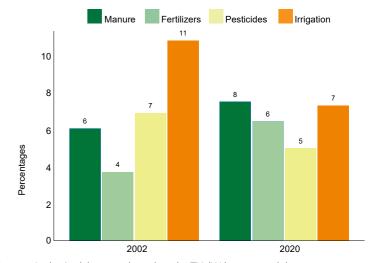
# Limitation in the use of modern inputs

Modern inputs refer to advanced agricultural products and technologies—such as improved seeds, fertilizers, pesticides, irrigation, and machinery—that enhance productivity and efficiency. However, microdata reveals that access to these inputs among smallholder farmers remains limited and highly uneven across regions.

Tete province stands out with the highest fertilizer usage, reaching 16% in 2020 (up slightly from 15.5% in 2002), while Zambezia and Sofala recorded significantly lower rates, at just 1.57% and 1.54% in 2020 (compared to 1% and 0.72% in 2002). Pesticide adoption remains even more restricted, with a national average of just 4.2%, and the use of mechanized equipment remains consistently low at 10%, regardless of crop type.

Although fertilizer and manure usage saw a modest increase of 2% between 2002 and 2020, pesticide and irrigation use declined by 2% and 4%, respectively, indicating that agricultural modernization in Mozambique is progressing slowly.

FIGURE 2 | Modern agricultural inputs over time



Source: Author's elaboration based on the TIA/IAI harmonized data set.

### **Limited commercialization**

Between 2002 and 2020, the share of households engaged in the sale of agricultural products—referred to as the marketing share—underwent notable shifts. In the North, the share fluctuated over the years but ultimately saw a slight increase from 64.9% in 2002 to 65.8% in 2020.

In contrast, the South experienced a sharp decline of approximately 35 percentage points, while the Central region also recorded a significant reduction of 16%. These declines highlight persistent challenges in the agricultural sector, including disparities in farm size, limited access to modern technology, and regional variations in market accessibility.

TABLE 1 | Household marketing share by region (percentage)

	2002	2003z	2005	2006	2007	2008	2012	2014	2015	2017	2020
North	64,9	66,7	71,5	66,9	63,0	63,9	61,2	56,4	57,6	60,5	65,8
Center	73,1	66,1	67,1	72,3	63,7	68,3	62,5	50,7	60,5	53,1	57,0
South	54,2	45,9	48,7	45,9	38,9	38,0	29,6	18,5	23,5	24,1	19,4
Observations	4.908	4.935	6.149	6.248	6.075	5.968	6.676	6.030	7034	7.004	23.708

Source: Author's elaboration based on the TIA/IAI harmonized data set.

# Insufficient budget

Between 2007 and 2022, Mozambique's agricultural policies and strategies faced a persistent funding gap, as state investments remained insufficient to meet the sector's financial needs. Although the projected budget increased significantly during this period, actual disbursements consistently fell short, averaging an annual deficit of 2.9 million meticais—equivalent to 16.95% less than planned each year. This persistent underfunding underscores the inadequacy of investments in the sector, limiting its potential for growth and development.