

Southern Africa

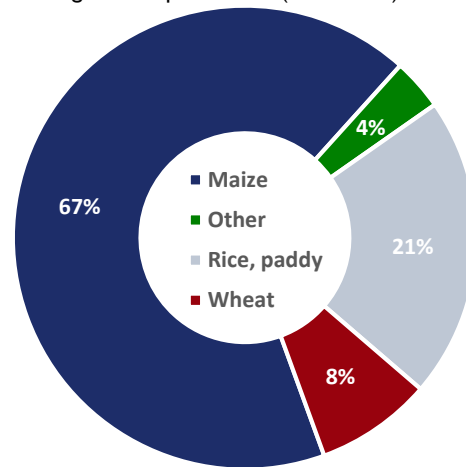
ABOUT THIS REPORT

This report provides an overview of typical production and market behavior in the Southern Africa maize market. The sub-regional markets covered include Katanga province in the Democratic Republic of Congo (DRC), Lesotho, Malawi, Mozambique, Zambia, and Zimbabwe (countries monitored by FEWS NET in southern Africa) as well as South Africa, Botswana, Namibia, and Swaziland.

MAIZE PRODUCTION IN SOUTHERN AFRICA

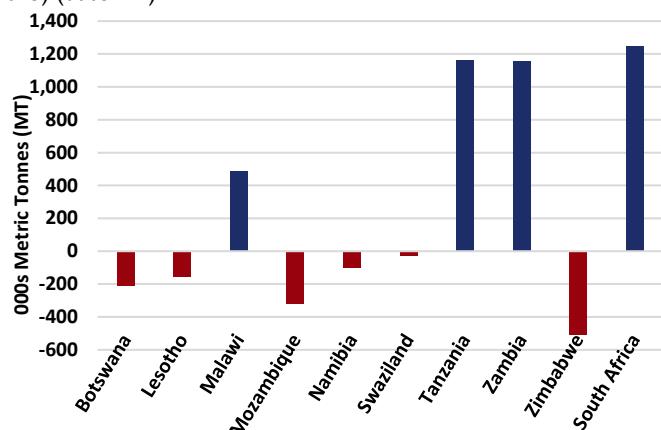
- Maize is the single most important cereal crop in Southern Africa, with a large percent grown directly for home consumption, particularly by the poor. It is produced on a commercial basis in every country except Mauritius and Seychelles and accounts for almost 70 percent of total cereal production in the region (Figure 1).
- White maize accounts for the majority of maize produced and consumed in Southern Africa. South Africa is the only country where yellow maize is grown in significant quantities and it is primarily for use as livestock feed. Trade flows within the region largely reflect trade in white maize¹.
- Consumer preference among poor households is for maize grain, which is milled using small local hammer mills to produce a coarse ground product for direct consumption (USAID SATH 2012).
- Southern Africa, as a region, is typically structurally surplus in maize supply (approximately 2.7 million MT).² This means that, on average, total regional production and carry-over stocks satisfy regional maize requirements, including consumption and industrial use, and government strategic grain reserve (SGR) stocks. However, national-level production and self-sufficiency vary widely from country to country (Figure 2).

Figure 1. Average cereal production (1990-2014)



Source: FAOSTAT.

Figure 2. Average national maize surplus/deficit estimates (2010-2015) (000s MT)



Source: FEWS NET calculations with data from SADC, SAGIS and FAO GIEWS.

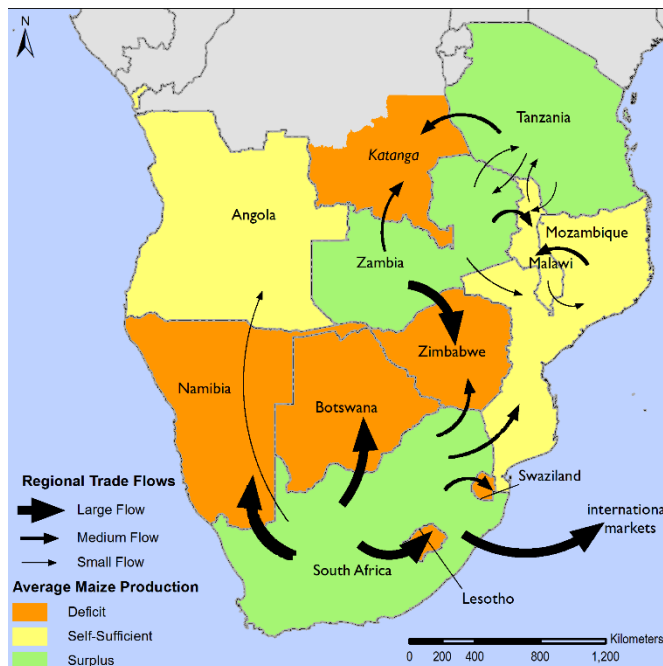
¹ This report will focus on the market for white maize.

² This number excludes Katanga Province of the Democratic Republic of the Congo (DRC), where deficits are on average very large and filled primarily through imports from neighboring Zambia and Tanzania.

OVERVIEW OF SOUTHERN AFRICA MAIZE MARKET

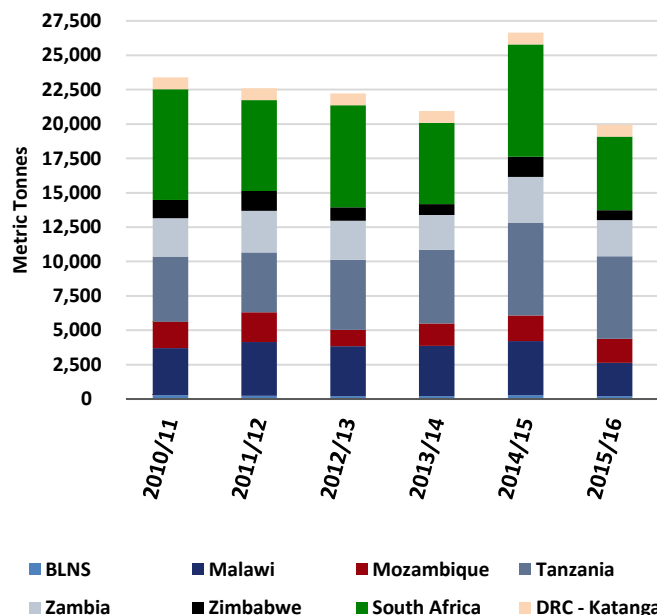
- South Africa, the region’s largest maize producer, contributes, on average, to over 40 percent of regional maize production (Figure 4).³ Although its domestic requirements far exceed those of other countries in the region, South Africa still typically produces a large exportable surplus of maize. South Africa exports, on average, 690,000 MT of maize to the region annually (SAGIS). This makes South Africa the main source of maize supply for structurally-deficit countries in the region during average years (Figure 3).
- Recently, Zambia has become an important regional maize exporter, as local production has increased progressively. Although Tanzania often produces an exportable surplus, its role as a regional supplier is less reliable as it often exports much of its maize to higher-income, structurally-deficit countries in the Greater Horn of Africa, Kenya in particular, due to strong effective demand and higher prices in that region.
- In addition to the large formal flows of maize exports from South Africa and Zambia (and Tanzania, to a lesser extent) to the region, informal trade flows between surplus and deficit areas of the region play a major role in distribution. In particular, informal maize flows from Mozambique to Malawi, South Africa to Zimbabwe, and Zambia to DRC fill localized deficits.
- The region’s dependence on rain fed maize production has led to volatile output levels from one year to the next. Over the last 30 years, growth in maize production was mainly due to an increase in area under production (USAID SATH 2012). In general, South Africa, Tanzania, Zambia and Malawi are countries that maintain a steady surplus while net deficit countries include Botswana, Lesotho, Namibia, Swaziland, Mozambique and Zimbabwe.
- Opportunities for trade can vary between deficit and surplus maize producing areas within each country. Trade flows across countries can however be characterized by three main marketing basins. The northernmost marketing trade basin involves major trade flows from Zambia into the neighboring Katanga province and Malawi as well as bilateral trade flows with Tanzania. Surpluses from southern Tanzania are also directed into Malawi and Katanga province (Figure 3).

Figure 3. Maize production status and typical trade flows



Source: FEWS NET.

Figure 4. Annual maize production (2010 – 2015)

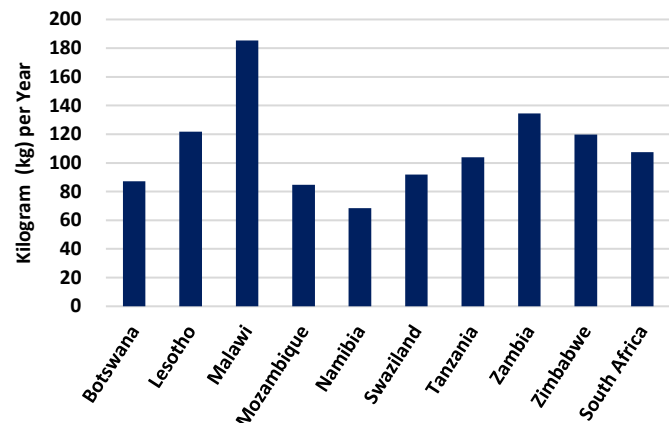


Source: FEWS NET calculations with data from SADC, SAGIS and FAO GIEWS.

³ This percentage increases to over 50% when Tanzania is excluded from regional estimates.

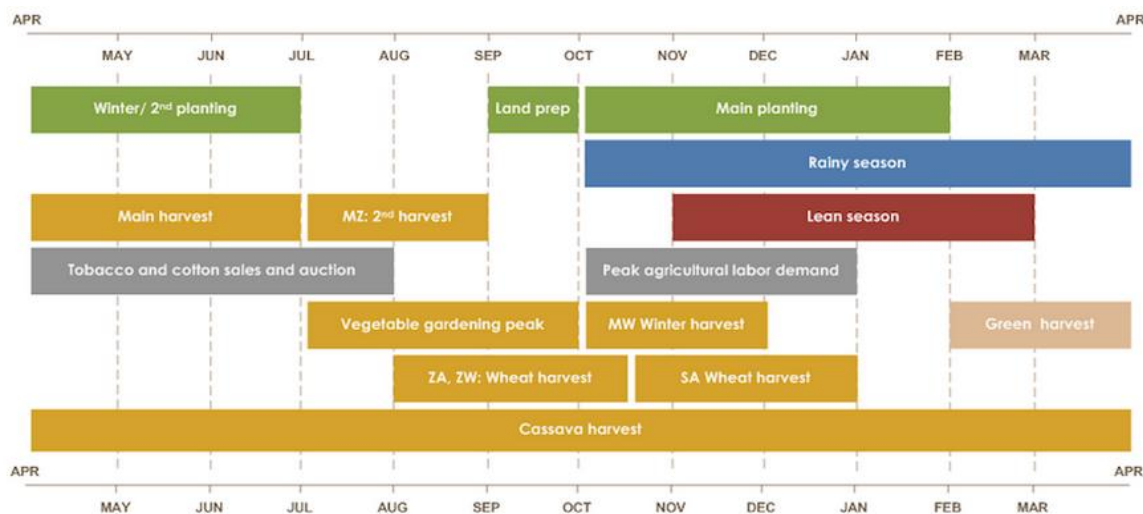
- The southernmost marketing basin includes trade flows from South Africa into Botswana, Lesotho, Mozambique, Namibia, Swaziland and Zimbabwe. South Africa’s maize industry has matured considerably following the emergence of major private trading companies and the launch of its commodity exchange, the South African Futures Exchange (SAFEX) in the late 1990s. South Africa has served as the main supplier for maize deficit countries in the region and its maize production is largely from commercial farms.
- The third marketing basin involves significant maize flows from Zambia into Zimbabwe and Malawi. It also involves two-way trade flows between northern Mozambique and Malawi. Mozambique participates in all three marketing basins as long distances and high transportation cost make it difficult for surpluses from the north to supply main deficit markets in central and southern Mozambique.
- Variations exist in per capita maize consumption across the region. Lesotho, Malawi, South Africa, Zambia and Zimbabwe all consume relatively higher quantities of maize on a per capita basis (over 100kg/yr.) while Namibia consumes the least. For a structurally deficit country like Lesotho, relatively high per capita maize consumption may be capturing other domestic requirements beyond human consumption such as animal feed and (Figure 5).
- There are various government agencies involved in maize marketing within the region: Agricultural Development and Marketing Corporation (ADMARC) in Malawi, Grain Marketing Board (GMB) in Zimbabwe, National Food Reserve Agency (NFRA) in Tanzania, and Zambia’s Food Reserve Agency (FRA), which is one of the most influential maize marketing agencies in the region.
- FRA is a parastatal established to maintain national strategic food reserves and manage national storage facilities. As a major player in Zambia’s maize market, the agency procures nearly all surplus maize at prices that typically exceed wholesale market prices in major maize-producing areas for either export or sale in the domestic market at pre-established prices. It also imports maize during deficit years for sale to selected large-scale millers at below market prices (Kuteya et al. 2014).

Figure 5. Average annual per capita maize consumption (2010 – 2015)



Source : FEWS NET calculations with data from SADC, SAGIS and FAO GIEWS.

Figure 6. Southern Africa regional seasonal calendar

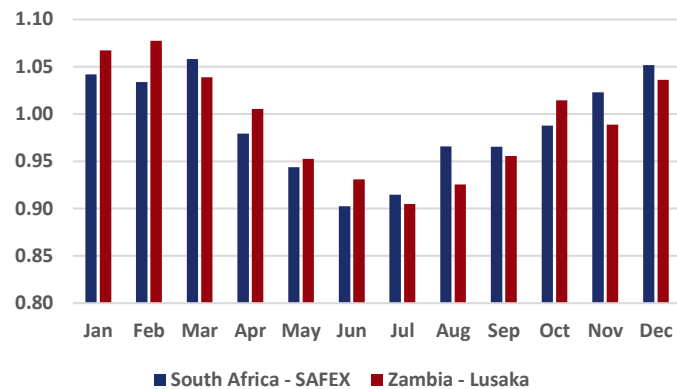


Source: FEWS NET.

SEASONAL CALENDAR

- The maize harvest in most of Southern Africa spans April to June. Prices are typically at their lowest levels in June and gradually increase until they reach their highest levels in January and February at the peak of the lean season (Figure 6 and 7). Prices typically decline rapidly in March and April as households consume from green harvests and supplies from the harvest reach the markets.

Figure 7. Average seasonal price index



Source : FEWS NET estimates from SAFEX and Ministry of Agriculture – Zambia.

TRADE DYNAMICS AND DRIVING FORCES

- Maize production in Southern Africa is generally rain fed and therefore highly susceptible to climatic conditions such as droughts and flooding. This can lead to large maize supply gaps and a high degree of variability in prices across the region and overtime (Figure 4). Price differentials between surplus and deficit countries provide significant incentives for both formal and informal trade.
- Botswana, Lesotho, Namibia and Swaziland (BLNS) are entirely dependent on South Africa for maize, giving significant incentives to South African farmers.
- Government intervention in some markets distort the normal price formation mechanism in the local and regional maize market (Myers et al. 2011). The implementation of export bans and price floors during deficit years can create disincentives in the maize market.
- The lack of suitable storage facilities in some countries prevents producers from storing maize in order to capitalize on market opportunities during lean seasons. Poor warehousing and storage facilities also lead to higher post-harvest loss limiting overall supply in domestic and regional markets. However, South Africa has a well-established storage industry with over 17 million tons of bulk storage capacity (Traub 2008).
- Genetically Modified (GM) maize is prohibited in many Southern African countries despite its potential to increase productivity. In practice, most countries allow import of milled GM grains either as food aid or on a commercial basis. South Africa is currently the only country within the region that actively produces GM maize and has had difficulty selling this regionally given existing GM restrictions. Zambia and Tanzania exclusively grow non-GM maize (WFP 2016).

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