POLICY BRIEF

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It's time to rethink SADC's transformative industrialisation for a just transition: Lessons from agro-processing regional value chains

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Introduction

The Southern African Development Community (SADC) Industrialisation Week hosted in Lilongwe, Malawi from 22 to 26 November 2021 reiterated the need to industrialise the region and create opportunities for intra-African trade and investment. However, there continues to be a disconnect between industrialisation and climate change, with little to no reference made to SADC's vulnerability and the responses required. In particular, agro-processing is one of the most significant industries when countries industrialise and it also hugely affected by climate change.

Southern Africa is a climate hotspot, with greater than average increases in temperature, and declining rainfall in the southern parts of the region. At the same time, there is good average rainfall and abundant water for agriculture in the northern parts of the region, which is one of the best areas in the world to sustainably expand agricultural production. This potential has been stymied by the lack of effective regional value chain strategies to link increased agricultural production with agro-processing to foster rapid industrialisation and economic diversification in food (Annan et al. 2015; Hussein and Suttie 2016). The region is thus faced with a huge challenge, along with the potential for transformative industrialisation to meet it.

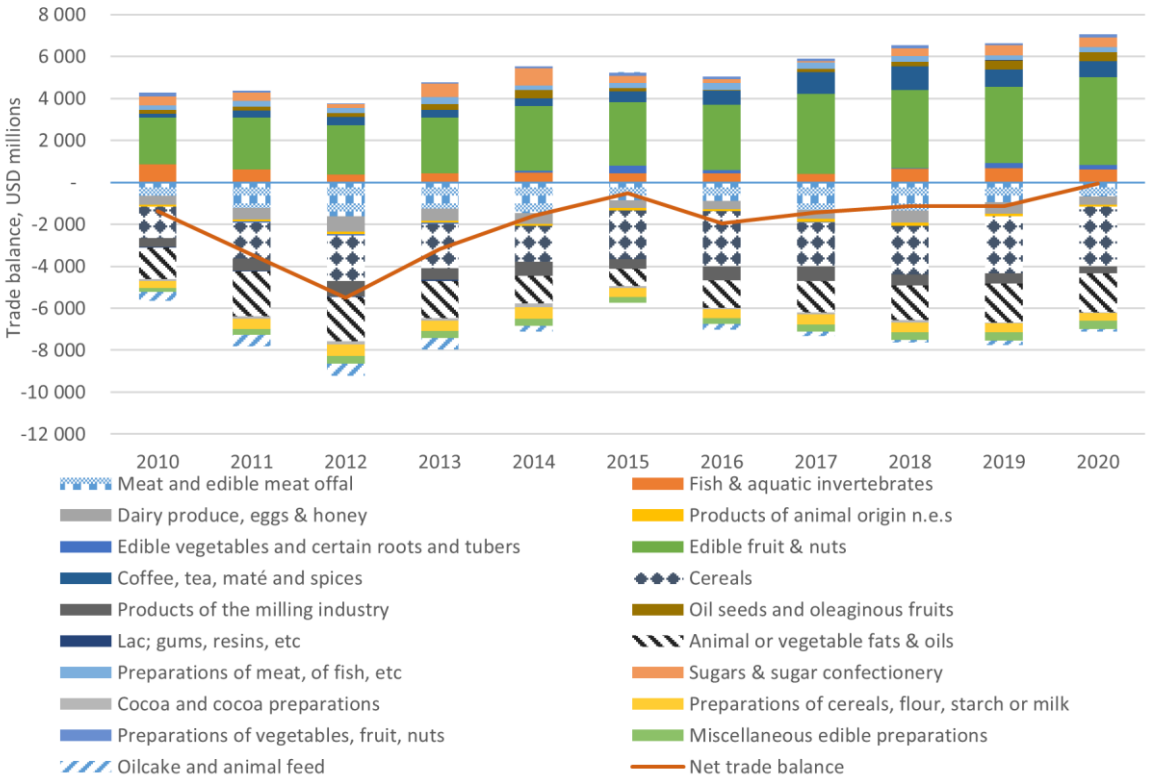
SADC continues to be characterised by limited structural transformation to broad-based, diversified industries, weak intra-regional trade, and an expanding youth population with few work opportunities. SADC has been a net importer of food products over the past decade, although the deficit reduced to close to zero in 2020 (Figure 1). The major net imports by SADC are cereals, followed by animal fats and oils, and meat and poultry products. This is balanced by exports, especially of fruit and nuts. The urbanising population and growing urban middle-class are driving an increase in food demand and a transformation of dietary preferences towards processed food (OECD/FAO 2021).

Agriculture production has grown over the past decade, largely due to an increase in land area under cultivation, even though this has resulted in land degradation and soil nutrient depletion (OECD-FAO 2016; Badiane et al. 2021). There is an urgent need to improve productivity and implement more sustainable production practices to improve resilience against droughts (Jayne et al. 2018). Fruit, along with oilcrops (including sunflower and soybean), recorded strong growth from a low base, up to and following the 2015/2016 drought. Competitive meat production,

however, has been constrained by the supply and costs of animal feed (with substantial imports to meet demand).

them in order to industrialise and develop climate-smart food regional value chains.

Figure 1: SADC's net trade balance for main food product categories, USD millions



Source: Author's analysis based on Trade Map

This policy brief motivates an urgent need to coordinate the transformative industrialisation of Southern Africa's regional value chains (RVCs) for food to meet the rising demand for processed food products in the context of climate change. The brief draws from the working paper by the authors for the SARChI Chair in Industrial Development's working paper series under the theme, 'climate change, industrial development, and a just transition and green industrial policy'.[1] The working paper analyses the performance and drivers of three key food RVCs – maize to maize flour, animal feed to poultry, and sugar to confectionery. This brief identifies key challenges and the steps requires to meet

Lessons from selected agro-processing regional value chains

The maize, poultry and confectionery value chains represent large shares of processed food demand and supply, and were selected to explore the challenges and opportunities for deepening linkages in SADC. Coordination along the regional value chains requires close cooperation from farming to processing, steered by an agenda for inclusive and sustainable regional industrialisation. It is important to emphasise that urgent investments are required to support agricultural production through improved water management and irrigation as part of climate-smart agriculture. These investments involve

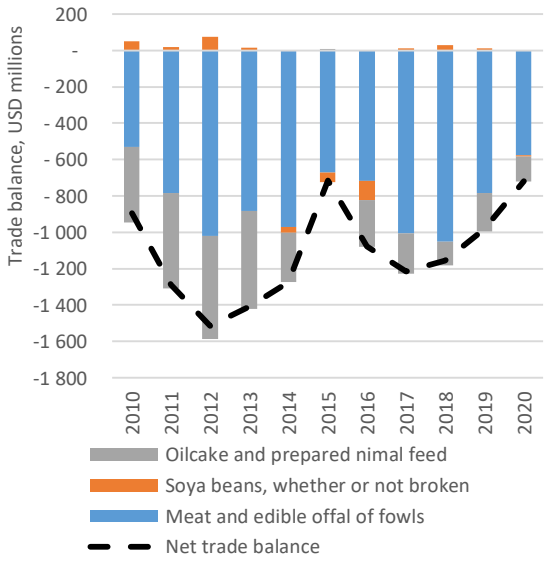
[1] Kaziboni, L., and Roberts, S. (2022). Industrial policy for a just transition to a green economy: The importance of regional food value chains in Southern Africa. SARChI Industrial Development Working Paper Series WP 2022-01. SARChI Industrial Development, University of Johannesburg.

supplying infrastructure, equipment and know-how and are themselves part of the necessary Green Deal for the region. In this way, SADC can develop regional value chains that are resilient and can respond to climate change, while assuring food security in the region.

Animal feed to poultry

Among the three value chains, the animal feed to poultry value chain offers the largest benefits from improved regional coordination, particularly given its linkages to animal feed. Soybean is a key input in animal feed, in which the region needs to be competitive relative to South America. Over the last five years, soybean production in Zambia and Malawi more than doubled from a relatively low base, thanks to conducive agronomic conditions and large-scale investments. At the same time, crushing capacity in Zambia and South Africa has been bolstered, partially driven by government incentives. For SADC to narrow the trade deficit (see Figure 2) and meet the growing demand for poultry, as well as other meat and fish, continued high levels of growth in soybean in these and other countries is required by boosting productivity in climate-friendly ways to ensure cost-competitive animal feed.

Figure 2: Animal feed to poultry trade balance: selected SADC countries



Source: Author's analysis based on Trade Map

Realising the opportunities in the value chain depends on bridging the gaps to link expanded soybean production, where there is available water and land, with industrial capabilities in poultry production. For this value chain, it is essential to manage the bargaining power exercised by large-scale vertically integrated poultry producers, along with appropriate institutional arrangements at the regional level to ensure increased participation and inclusive growth. This is already happening to an important degree with investments in crushing plants and animal feed mills in countries such as Zambia and Malawi. Such interventions can be scaled up to address the gaps in regional value chain linkages. In addition, the region can consider alternative export markets for soybean such as China, where demand for animal feed continues to grow, while supplies from South America are constrained given the deforestation and changing land use associated with this production (Voora et al. 2020). Thus, there are substantial export opportunities, in addition to meeting the growing regional demand.

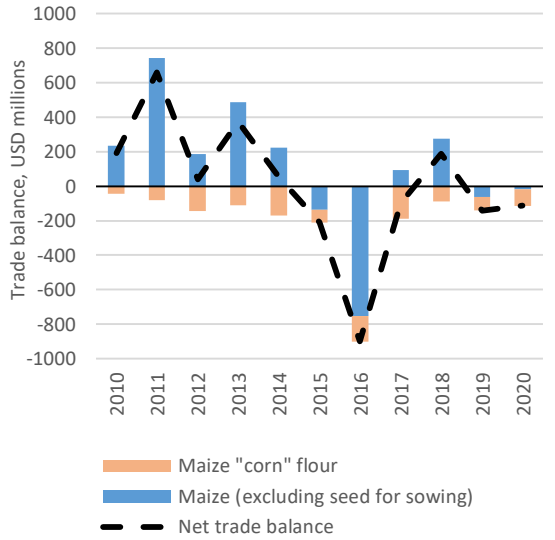
Maize to maize meal/flour

By comparison, the maize to maize meal value chain supplies the single most important staple across the region, and the ability to meet SADC's needs is skewed towards South Africa's large-scale commercial maize farmers. A rebalancing is required, given South Africa's vulnerability to drought.

The adverse effects of the El Niño drought in 2015/2016 on production demonstrate what we can expect with greater frequency and depth under global warming, with substantial supply shortfalls from the effect in South Africa (Figure 3). In El Niño years, the good rains recorded further north – in Tanzania, parts of Zambia, the DRC and northern Mozambique, mean that production and trade could meet the region's overall needs. However, high transport costs and poor storage and logistics mean that the integrated regional markets are not present to meet supply shocks, and countries compound this with short-term

trade restrictions. The evidence suggests large traders can profit from shocks by cornering markets, with speculation exacerbating price spikes.

Figure 3: Maize to maize flour trade balances: six selected countries in SADC



Source: Authors' analysis based on Trade Map

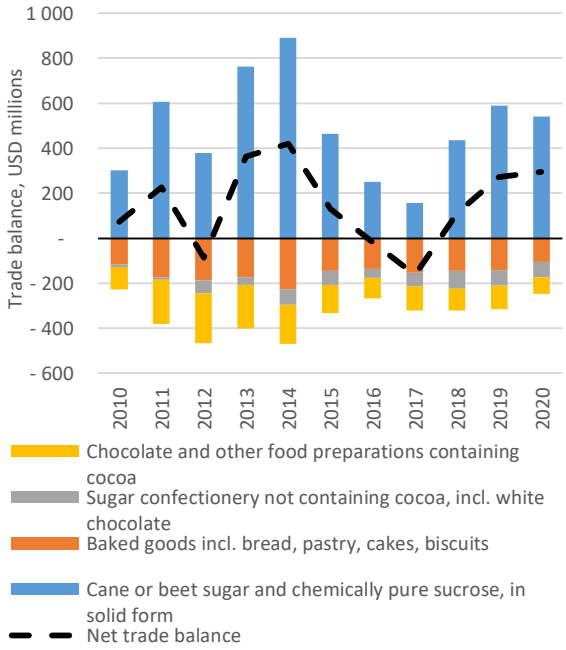
A completely foreseeable situation could be addressed through an SADC food security and value chain strategy, coupled with geographic diversification of maize production and investment in infrastructure, along with buffer stocks.

Responding to the challenges of climate change, while opening up markets to greater inclusion, requires addressing linkages and capabilities along the maize value chain. The appropriate capabilities in production and water management, storage infrastructure and improved logistics are urgently required for farmers across the region to improve their production and resilience to weather shocks. This is especially important given the rainfall projections for South Africa and its current position as the major regional producer, in addition to the need to meet growing demand from cities such as Dar es Salaam, Maputo and Lusaka.

Sugar to confectionery and baked goods

In the sugar-to-confectionery value chain, there is a highly structured regime to support upstream sugar production and milling across the region through extensive import protection from non-SADC imports. The import protection is justified by the international support given to sugar in other major sugar-producing countries around the world. However, the import protection for the sugarcane millers subsidises this water-intensive crop while raising the cost of industrial sugar, making downstream industries less competitive. This is intensified by the high levels of concentration at the milling level, with only a few companies operating across the region. Consequently, the region remains a net exporter of sugar and a net importer of diversified and higher value-added confectionery and baked products (Figure 4).

Figure 4: Trade balance for the sugar-to-confectionery and baked goods regional value chain in SADC



Source: Authors' analysis based on Trade Map

Sugar confectionery and baked goods represent opportunities for expanding processing capacity and capabilities in SADC. While firms are investing in downstream capabilities outside of South Africa, such as Trade Kings in Zambia, the relatively high cost of sugar and the inability of downstream players to bargain for better pricing affect the competitiveness of processing companies (Bosiu and Vilakazi 2020).

In the context of climate change, there are also important questions to consider regarding the sustainability of sugar production, given its high water usage and the rationale for affording it the level of support. Even though sugar can be used in various industrial applications (including biofuel), this needs to be weighed up against other production for which water could be used (such as high-value fresh fruit that generates substantial employment and exports; Chisoro-Dube and Roberts, 2021).

A comparison of the three value chains points to clear aspects of similarity and important differences, as well as pointing collectively to challenges to a regional industrial policy for food. Given South Africa's strategic role as the largest and most industrialised producer and the largest source of demand in each value chain, it is important to leverage the capabilities that have been developed by lead firms in the country to the benefit of the region at large. However, the shared vision for industrialisation needs to be anchored in mutually beneficial outcomes for all the member states.

The imperative of an SADC approach to industrialisation

The impending climate emergency means that the costs of failure to act on an SADC green industrialisation agenda will be catastrophic and the opportunities for transforming to higher value and more sophisticated activities will be lost. SADC is a global hotspot in terms of climate change. However, the region will be affected by climate change to different degrees, which can now be anticipated. Some parts of the region will continue to have good conditions for agriculture to meet the growing demand for food. Regional trade, alongside climate adaptation interventions, therefore can ensure food security across the region. More frequent extreme weather means it is essential to invest in better water management, storage facilities, logistics and support for farmers to ensure greater resilience. In other words, a regional industrialisation plan for agriculture is required. Conversely, following narrow national agendas will exacerbate the shocks from greater weather variability and undermine food security.

SADC's industrialisation agenda, and the Costed Action Plan, provide a generalised and high-level approach to achieving regional industrialisation. While the SADC recognises the need to ensure that regional industrial cooperation should add value to national industrial policies, neither the strategy and roadmap nor the Action Plan provide the specific supply-side and demand-side interventions that are required to direct regional industrialisation, especially in the context of climate change. Apart from the Sugar Cooperation Agreement, which focuses on the upstream level only, there is no unified approach in developing regional value chains for maize to maize meal nor animal feed to poultry. Ultimately, the current approach to industrialisation places national interests in conflict with regional priorities.

The SADC Secretariat and the respective national ministries/departments that drive industrialisation need to steer a Green Deal for the region. The Green Deal for SADC should include the development of alternative energy sources (linked to the Regional Renewable Energy and Energy Efficiency Strategy and Action Plan) and transportation, such as green hydrogen and solar power, for which Southern Africa is one of the best locations in the world. Namibia is already showing the way in this regard, with plans for a green hydrogen complex already under way. Transitioning SADC towards lower carbon emissions will contribute to curbing the catastrophic events associated with climate change, while driving transformative industrialisation and securing food for the region's economies.

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