

# The protein transition in Urban South Africa: how to stimulate demand

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## Background

There is increasing recognition that animal livestock and meat consumption contribute to a range of environmental problems including CO2 emissions, deforestation, and biodiversity loss, among others. Reducing meat consumption, especially red meat, is a key step towards a transition to healthy diets which can supply food for a growing population without exceeding planetary boundaries [1,2]. However, in many countries, especially middle-income countries, such as South Africa, meat consumption is increasing. South Africa currently has one of the highest meat consumption levels in the world [4,5]. This is a result of rapid population growth, increasing incomes and urbanization coupled with cultural values prioritizing meat consumption [3]. The current trajectory of meat consumption in South Africa is unsustainable. In South Africa, beef and lamb production alone exceed planetary boundaries by 200% in terms of greenhouse gas emissions, and together with pork and milk contributing to more than 80% of the fresh water used by agriculture [6].

In addition to the environmental challenges, South Africa is facing a high burden of nutrition related adverse health outcomes, including high rates of non-communicable diseases such as diabetes and cardiovascular disease, as well as high levels of childhood stunting, 21% of children under 5. Obesity is a growing challenge, with 41% of women and 16% of men suffering from obesity [6,7]. A transition to a more plant-based diet, high in fruits, vegetables, legumes and whole grains, may support improvements in health and environmental outcomes.

## Methodology

This case study is based on a literature review focusing on factors which enable and constrain the protein transition in the South African context.

Initially a desk-based literature review was carried out. The key issues identified were explored further in a series of face-to-face interviews (n=8) with stakeholders from academia, government, civil society and the private sector in South Africa carried out in December 2023.

## Objectives

This fact sheet explores the current knowledge about what factors influence South African youth, especially those living in urban and peri-urban areas, to choose meat substitute products. The review uses a food system framework (Berkum, Dengerink, and Ruben 2018) to consider factors which both motivate and constrain youth in urban and peri-urban settings to consume less meat and more meat substitutes. The aim is to identify critical knowledge gaps to be explored in future research. The review focuses on consumption of meat analogue products, designed to mimic the sensory appeal of meat, rather than other meat substitutes such as laboratory grown meat or alternative animal protein sources such as insects.

## Summary of Results

**Consumer preferences:** The majority of the studies investigating the protein transition in South Africa have focused on factors which shape consumer willingness to try meat alternatives. This research found that while consumers, especially younger ones, are willing to try meat substitutes, costs of these products remains a key limiting factor, especially in a context where 81% of consumers live in low income households [8]. Meat alternatives are often perceived as an expensive status symbol [9].

Consumers who are motivated to consume meat substitutes do so based on perceived health benefits including nutrition and energy content, appearance and price [10].

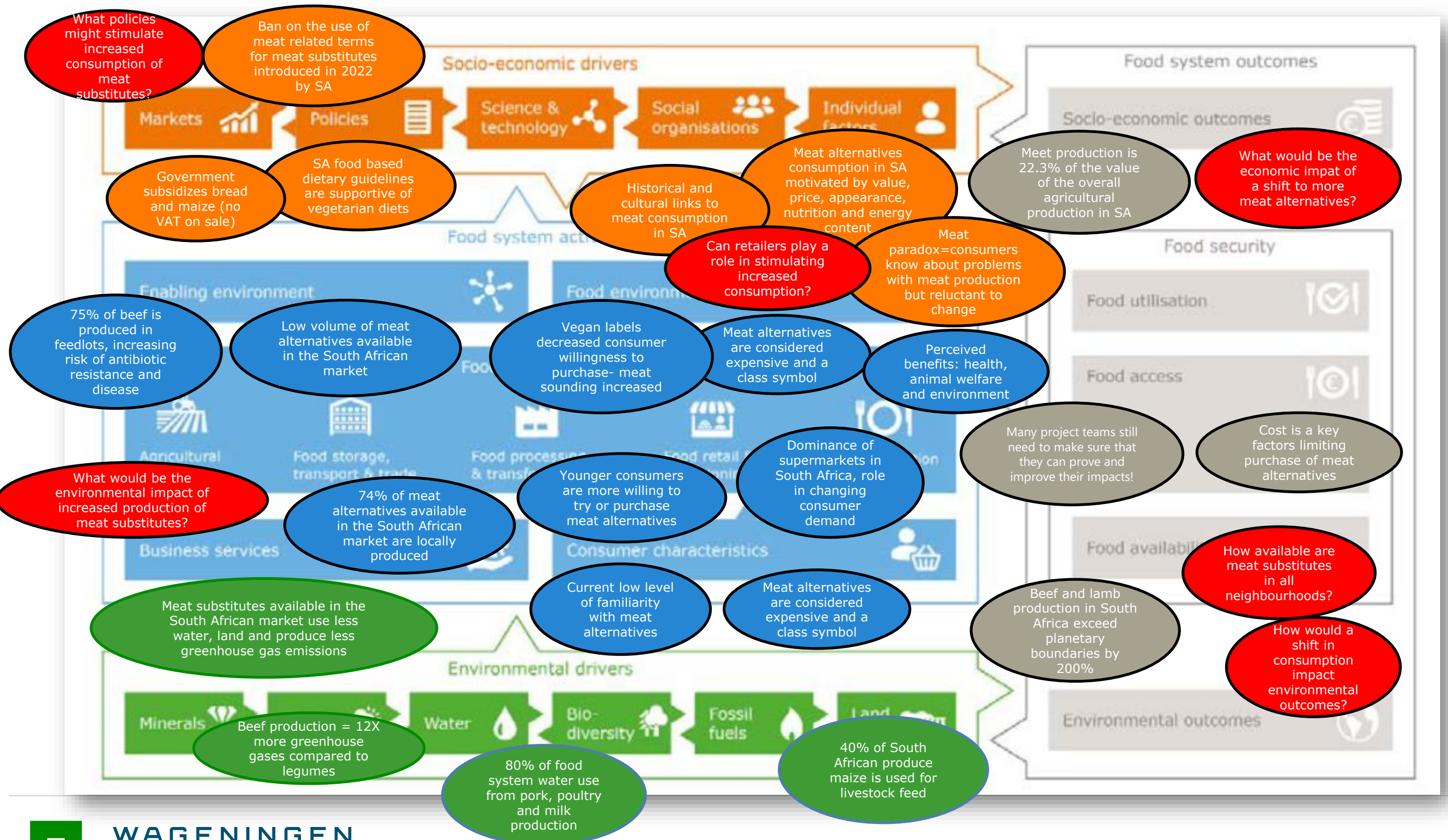
Compared to other contexts, animal welfare and environmental concerns are less prioritized by consumers, and consumers are less supportive of the idea that reducing meat consumption is a practical solution to address climate challenges [11,12].

**Production:** Meat production is important to the South African economy, responsible for almost a quarter of the overall value of agricultural production in the country, which has invested in good infrastructure, and technology for meat production [16]. Alternative meat production is still marginal, however domestic production is increasing and a survey of the major supermarkets found almost 100 meat substitutes available, 74 percent of which are domestically produced, usually at a lower price point than imported products [15].

**Processing and retail:** Supermarkets dominate the retail market in South Africa, and as such can play a role in driving consumer demand and shaping consumer demand [13,14]. Other main actors are fast food restaurants which increasingly add alternative meat products to their menus.

**Enabling environment:** The policy environment is split in terms of its support for meat alternatives. On the one hand, the South African food based dietary guidelines are supportive of meat alternatives as part of a healthy diet [17,18]. On the other hand, in 2022 the Department of Agriculture, Land Reform and Rural Development decided to ban using meat related terms ("veggie biltong", "plant-based meatballs", "veggie burgers") for plant-based alternative as a result of lobbying by the South African Meat Producers Association [19]. This ban is currently contested in court by civil society organisations supporting the protein transition.

# Drives of meat substitute consumption in South Africa: A food systems perspective



# Future research questions

## Key research questions identified:

This review sought to identify critical research gaps related to increasing the consumption of meat substitutes especially among youth in Urban South Africa.

- **What would be the economic impact of consumers consuming more meat substitutes, both in terms of potential losses for the meat industry or gains for others industries?**
- **What would be the health related benefits of a dietary transition to more plant based proteins?**
- **What is the environmental impact of meat substitutes produced in South Africa taking into account the use of local crops?**
- **There is more research looking at barriers and enablers to stimulate consumer demand for meat substitutes. There is limited research on factors which will stimulate increase in production. Is there a role for financiers or retailers? What policies might stimulate increased production?**
- **Research has focused on consumer willingness to try or purchase meat substitutes, but there have been limited interventions designed to address factors which change purchasing patterns. What role could supermarkets and fast food chains play in driving the sustainability transition?**

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