

The Impact of Botswana's Vegetable Import Ban



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Introduction

The Botswana government imposed a ban on the importation of a wide range of horticultural products – mostly vegetables – in early 2022. In mid-2024, the ban was extended to a wider range of products. Most of the commentary on the impact of the import ban has focused on two particular objectives, i.e. reducing imports and boosting local vegetable production. Not surprisingly, the ban has resulted in reduced vegetable imports and increased local production. But any proper assessment of the impact has to cover a much broader range of economic and social impacts beyond the target ones. In other words, assessment of the policy impact should include a full cost-benefit analysis, and not just a “benefit” analysis, ignoring the obvious costs. This note is not a full cost-benefit analysis – an exercise that should be carried out by Government - but attempts to identify and discuss a range of those costs and benefits¹.

Factors to consider in the impact analysis

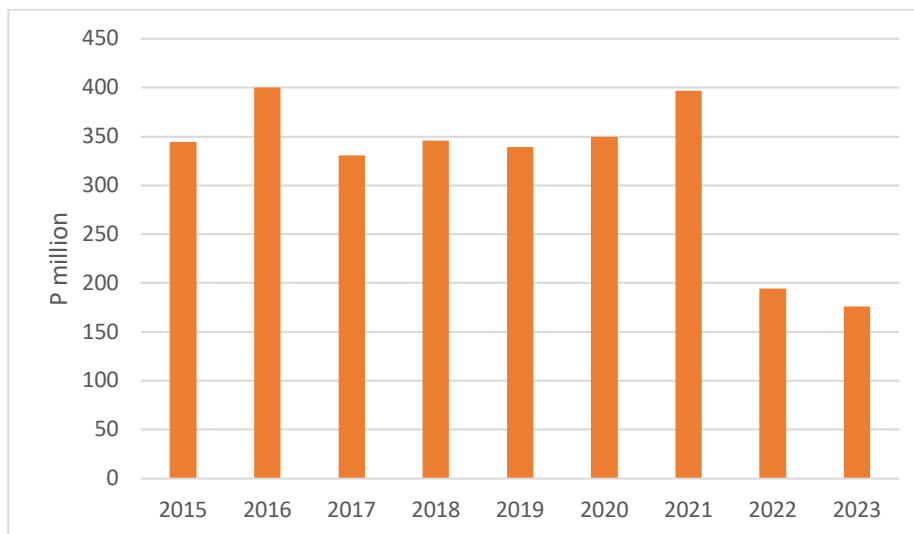
The primary objectives of the import ban were to reduce imports and increase local production of vegetables. Unsurprisingly, the ban was judged to be successful in reducing imports (not a very difficult challenge; it would be very strange if an import ban did not reduce imports). The Ministry of Agriculture claims that output of horticultural products has increased, but no figures have been published for the domestic production of different products to substantiate this claim.

Data are available from Statistics Botswana on **vegetable imports**. In the two years prior to the ban, vegetable imports averaged P373.5 million a year. Since the ban came into effect, imports averaged P185.3 mn in 2023-23 – a reduction of approximately 50%. This amounts to a reduction in annual vegetable imports of around P190 million, or some 0.2% of total imports².

¹ This note was largely prepared before the change of Government following the October 2024 general election. The new government has subsequently announced a phased lifting of the ban,

² The net saving on the import bill is of course less than this, given the additional imported inputs that will be required (seeds, fertiliser, equipment etc.) and potential losses in exports (especially tourism earnings) as a result of the ban. Furthermore, if the policy objective is to help the balance of payments, this result (less than \$15 million import saving) is insignificant. A contribution of a similar magnitude could result from attracting a single large manufacturing exporter to Botswana, and with none of the negative side effects. To put this figure into perspective, Botswana's diamond exports amount to (in a normal year) over US\$4 billion (BWP50 billion).

Figure 1: Annual Vegetable Imports (P mn)



Source: Statistics Botswana

Nevertheless, assessing the policy in terms of the impacts on production and imports only is inadequate, because there are many more impacts. Amongst the most important impacts that must be considered are the following:

Price: has the substitution of imports with domestic production led to higher or lower prices for vegetables? (NB the *a priori* assumption is that it leads to higher prices, as the reason that imports can penetrate the market in a liberalised environment is their competitiveness and lower prices).

Real incomes: what is the impact of the ban on the real incomes of households? Some will gain (due to employment/wage income from new agricultural projects), while others will lose (if there are any job losses, and if prices rise and real incomes fall as a result).

Supply reliability: one of the objectives of the policy is to purportedly improve “food security”, of which an important component is the reliability of supply (avoidances of shortages or stock-outs) and the availability of food at competitive prices.

Food quality: does the substitution of imports with domestic production lead to higher or lower food quality?

Employment: creation of new jobs in horticulture (more than might be lost elsewhere).

Competitiveness: as per the stated objective, supporting the vegetable production sector to become more competitive.

Sustainability: is the sector, or elements of it, moving towards sustainability without protection (i.e. can be competitive vis a vis imports)?

Impact on other sectors: while the immediate impact of the ban is on the agricultural sector, there are significant knock-on impacts on other sectors (e.g. retail, tourism).

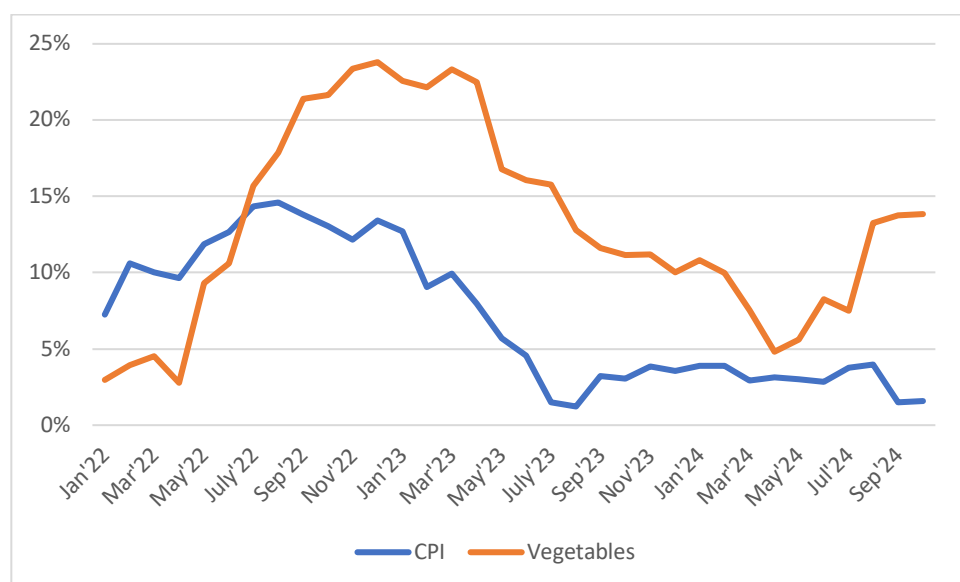
Assessment

Perhaps the most important element of these other aspects is the impact on prices, because this affects everybody, and has an impact on living standards and inflation. How can this be evaluated?

Prices and Real Incomes

One approach is to look at vegetable price inflation, using data from Statistics Botswana. As shown in the chart, vegetable price inflation rose sharply soon after the import ban came into effect, reaching a peak of 24% at the end of 2022 (after 12 months of the ban). For almost all of the period of the ban, vegetable price inflation has exceeded overall inflation. While this is not conclusive – we do not know what vegetable price inflation would have been without the ban – this certainly suggests that the result has been higher prices.

Figure 2: Inflation: Vegetable Prices and Overall



Source: Statistics Botswana

We can illustrate the impact of this by considering potatoes, which are the largest selling vegetable item in Botswana. According to StB, potatoes have a weight of 0.22% in the CPI. Applying this to overall annual consumer spending (P105 billion), this implies that total household spending on potatoes (before the ban) was some P234 million a year. Roughly, the price of potatoes has doubled since the ban was introduced (i.e. domestically produced potatoes are approximately double the cost of imported potatoes). This means that to maintain the same consumption of potatoes, households would have to spend an additional P234 million on potatoes after the ban³. This is equivalent to an average of P329 per year per household – a substantial amount for a low-income household already struggling to make ends meet. Adding in the price rises for other vegetables where there is an import ban, the cost to households will be even higher, leading to a reduction in real incomes and living standards.

³ Based on 2015/16 household survey data. More recent trade data suggests that it was somewhat higher than this before the ban was imposed.

It is not possible to definitively calculate whether the additional incomes generated by new jobs in horticulture is larger or smaller than the reduced real incomes resulting from higher vegetable prices – the required data are not available. However, indicative estimates using plausible numbers indicate that the nationwide loss of real household incomes due to higher prices far exceeds additional incomes from employment⁴.

Overall, the impact of higher vegetable prices and reduced real incomes is to increase poverty at the household level, and to cause nutrition standards to deteriorate. High levels of poverty and child malnutrition are already serious problems in Botswana, so a policy that contributes to making them worse is difficult to defend.

Supply reliability/Food Security.

One of the arguments put forward for the ban was that it would improve national “food security”. This has always been unconvincing, given that Botswana as a country has never had a food security problem (imports have always been readily available to fill shortfalls in domestic supply)⁵. Shortages have only risen since the import ban was imposed – and are now frequent and widespread. So food security – measured in terms of reliability of supply – at the national level has deteriorated. At the household level, food security is related to the affordability of food – where it comes from is irrelevant – and by pushing up prices, the import ban has undermined household food security (because households can afford to buy less food from a given income).

In contrast to the proclaimed objective of promoting food self-sufficiency as a necessary underpinning of food security, the opposite has happened (as expected). Nowhere in the world is it credible to argue that food security requires self-sufficiency; instead, cross-border trade plays a key role in food security⁶. The self-sufficiency/food security argument is particularly questionable in Botswana, which is arid, has poor quality soils, very limited surface and ground water supplies, low and erratic rainfall, and is highly vulnerable to climate change. Indeed, official policy since 1991 has been to secure food security through imports, acknowledging that self-sufficiency does not lead to food security (see Box 1).

⁴ For instance, if there are an additional 1,000 jobs in the horticulture sector, paying an average monthly salary of P2,000, this would generate an additional P24 million a year in incomes. By contrast, and based on the increase in the cost of potatoes, the real income losses for households from higher prices could lie in the range of P250-P500 million a year.

⁵ There were some short-lived supply shortages at the height of the COVID-19 pandemic, but it is important to recognize that this was due to Botswana’s decision to restrict entry at the border, not to any supply shortfalls from South Africa. Taking the year 2020 as a whole (the main year of covid-19 restrictions), there was no reduction in the value of vegetable imports, so any import disruptions were short-lived.

⁶ The weakness of the food security = food self-sufficiency argument can be well illustrated in the case of Singapore, which has achieved food security through the importation of food products from neighbouring Malaysia and other trading partners. Any attempt to use Singapore’s limited land to produce food and become self-sufficient rather than focus on producing what the country was good at (manufactures and services) would not have permitted the country’s rapid rise to become a high-income country in the decades after independence.

Box 1: Agricultural Policy and Food Security

Botswana's current official national policy towards the development of the agricultural sector dates back to 1991 (National Policy on Agricultural Development). Prior to 1991, national policy had been one of achieving food self-sufficiency, particularly for the major foodgrains consumed in the country, notably maize and sorghum. In 1989, an in-depth agricultural sector assessment was undertaken to evaluate the impact of the policy of food self-sufficiency and make proposals concerning the future direction of the sector in terms of economic and environmental sustainability, efficiency etc. The results of this review recommended the abandonment of the food self-sufficiency policy and the adoption of food security as a policy objective. The review concluded that, given the country's endowment in terms of natural resources and an increasing competition for scarce resources, it was not possible for Botswana to achieve food self-sufficiency without causing serious economic as well as undesirable environmental consequences.

The assessment found that the domestic cost of producing maize under the import substitution strategy was twice the import parity price. The price of the locally produced maize was therefore not competitive compared to imported maize. Pursuing food self-sufficiency regarding maize in Botswana was found to be economically costly and unsustainable.

The 1991 Agricultural Policy therefore entailed an explicit shift towards food security. A food security strategy promotes efficient and competitive domestic production on the basis of comparative cost advantages. For those commodities where the country does not enjoy this advantage, commercial imports should meet the shortfall in order to satisfy a country's total consumption requirements. It is important to note that the current Agricultural Policy therefore does not equate food security with food self-sufficiency, but instead concludes that food security comes from having access to competitively priced foodstuffs. It also concludes that pricing should be based on import-parity prices and market forces.

References:

National Policy on Agricultural Development (1991), Government White Paper No. 1, Gaborone, Botswana.

Sigwele, H.K. (1993). 'Food Self-Sufficiency versus Food Security': Which Way Forward? Ministry of Agriculture. Paper to the Conference of the Botswana Society, Gaborone, Botswana.

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Product Quality.

It is evident even to the casual observer that for many products, the quality of domestic supply is often far below the quality of previously imported products⁷. Overall, the ban has led to a decline in the quality of fresh produce available in the market, and much reduced choice (and hence lower value for money for consumers).

⁷ This is particularly evident for products such as potatoes, tomatoes, lettuce, garlic and ginger.

Production and Employment.

Very limited data is available on these critical variables. Neither Statistics Botswana nor the Ministry of Agriculture publishes data on employment or production of vegetables. To properly assess the impact of the ban, there should be figures on the production of individual vegetable products, by weight and value, over say the past five years, so that the impact of the ban on output of different products can be properly observed. Incidentally, StB figures on the output of the crop farming and horticulture sub-sector of the economy (in the national accounts) show no significant increase in the two years since 2021.

The employment data published by StB is not disaggregated enough to evaluate trends in horticultural employment since the ban⁸. While some increase in employment is to be expected, there are risks of employment losses in other sectors that have been adversely affected, and due to reduced real incomes.

Competitiveness

While building competitiveness of local producers is stated to be one of the objectives of the import ban, no evidence is provided to indicate whether this has been achieved – for instance the Ministry of Agriculture has not been publicly tracking domestic vegetable prices *vis a vis* import prices. Nevertheless, the Ministry's decision in early 2024 to extend the ban (in time) indicates that local producers are still not competitive with respect to imports.

Longer-term, it is questionable whether vegetable production for the domestic market in Botswana will ever be truly competitive⁹. The impact of climate change, with higher temperatures, reduced and more erratic rainfall, and more storms, floods and droughts will undermine competitiveness, especially when compared to neighbouring countries that have better soils, better water supplies, lower temperatures and a wider range of climatic zones. Pressures on Botswana's scarce water supplies will, in the long term, require that the consumption of water by low-productivity activities at sub-economic prices is minimised. But the main problem is that low-cost production requires economies of scale, and economies of scale require exports. Exports will not be possible if the ban is implemented in contravention of the SACU Agreement (see below).

Impact on Other Sectors

The impact of the ban on other sectors of the economy also needs to be considered. There are two sectors that have been particularly affected: retail and tourism.

The first is the **retail sector**. Several retailers have noted that product shortages have limited their sales below what would have been expected if imported vegetables have been available.

⁸ The published data is for "agriculture, forestry and fishing as a whole", which includes cattle farming and crop farming as well as horticulture.

⁹ For instance, the bulk of Botswana's home-grown potatoes come from the Ghanzi region in the west of the country. It is highly unlikely that these will even be competitive with South African potatoes in Gaborone. First, Ghanzi potatoes have to be transported almost 700km to Gaborone as compared to half that distance from SA wholesale markets. Second Ghanzi potatoes are irrigated using groundwater, which has high fuel and equipment costs, as opposed to partial rainfed watering in SA. Third, temperatures in Botswana are much higher (and less suited to potato growing) than in SA, leading to seasonal shortages as well as quality issues with summer potatoes.

Shortages of potatoes in particular have had a major impact in causing lost sales, amounting to tens of millions of Pula across the sector. This has an impact on profitability and could impact on employment if prolonged.

The second is the **informal sector**. Catering businesses (e.g. roadside food stalls) have been adversely impacted by the shortages of potatoes and other vegetables, while informal traders have resorted to selling smuggled products when domestic supplies are unavailable, risking huge fines. Traders have also been impacted by losing money on poor quality produce that has to be thrown away¹⁰.

The third, and perhaps the biggest impact, is on the **tourism sector**. As is well known, much of Botswana's tourism offering targets high-value customers with a high-quality product, including high-quality catering. Maintaining these standards is simply not possible given the restrictions on vegetable imports and the non-availability of specialised, high-quality products. This will in turn undermine Botswana's tourism sector. Tourism enterprises have also faced higher costs of production due to the ban, which will eventually result in higher prices¹¹. Customers will be discouraged (due to poorer value for money) and will consider going elsewhere, and the best chefs working in hotels, safari camps and other accommodation establishments will migrate elsewhere where their skills can be put to proper use. The gradual undermining of Botswana's reputation as a high-end tourism destination will have a long-term impact that will be difficult to recover from.

The fourth indirect impact is on the **Botswana Unified Revenue Service (BURS)**, which is charged with monitoring border posts for possible smuggling of vegetables. Besides imposing outrageously high fines on those who are caught (completely out of proportion to the seriousness of the offence), BURS has introduced a highly intrusive inspection regime at ports of entry (both land and air borders). By searching the bags of international visitors for smuggled onions and other banned goods, BURS has departed from best practice which is to undertake "risk-based" inspections. It has also caused major delays, especially at airports, where there are long queues to enter Botswana due to BURS limited capacity – in terms of infrastructure and personnel - to carry out inspections. This distracts BURS from their core tasks which are to address the smuggling of high-value and illegal items. It also creates an extremely unwelcoming arrival experience for international visitors, further undermining Botswana's tourism attractiveness.

Offsetting this, there is likely to have been a positive impact on firms in the **agricultural inputs supply chain** (seeds, fertilisers, agricultural equipment etc.), although there is no straightforward way to quantify this.

¹⁰ "A Rotten Potato Deal", The Voice, 9th February 2024. The article recounts how small-scale potato vendors have lost money after buying potatoes from Ghanzi that quickly went rotten and had to be thrown away. At the root of the problem is that potatoes are a temperate crop and are not suitable for growing in Botswana in the summer months, as the heat makes them "cook" either in the ground before harvesting or during transportation and storage. Other reports suggest that rather than acknowledge this and face the problem of shortages, the farmers have been pressured by Government to grow and harvest potatoes out of season (i.e. during the hot summer months), leading to post-harvest crop losses on the part of traders.

¹¹ In response to the non-availability of potatoes, some tourism enterprises have been buying (imported) frozen chips to be turned into mashed potatoes to serve to guests, at much higher costs than usual.

International Trade

Botswana has generally been committed to the principles of free trade, recognising that as a small country, it will always be an open economy dependent on both imports and exports, and that an absence of trade restrictions facilitates both and makes the country better off. Hence the country's membership of three key regional trade agreements: the Southern African Customs Union (SACU); the SADC Free Trade Area (FTA); and the new African Continental Free Trade Area (AfCFTA). All of these agreements have provisions for the reduction or elimination of import tariffs, and – of particular relevance in the case of the vegetable ban – the prohibition or easing of non-tariff barriers to trade, including quantitative restrictions.

Botswana is also a member of the World Trade Organisation (WTO). WTO rules permit trade remedies under certain circumstances. These include if imports cause economic damage due to “unfair” competition if imports are alleged to be dumped or subsidised, or if there is a surge in such imports. None of these reasons have been cited in the case of Botswana's vegetable import ban. The fact that imported products may be cheaper than domestic products is not evidence of “unfair” competition or dumping under WTO rules, as it simply reflects the fact that foreign producers are more efficient, productive and competitive – which is the whole basis for the gains from trade that make importing countries better off.

It has been claimed that the SACU agreement allows member states to introduce import restrictions in the case of “national security”. However, this needs to be explored further, in particular the assumption that banning the import of vegetables automatically meets the “national security” criterion. But vegetables are hardly a security item as conventionally understood¹², and, as discussed above, national food security (a different matter) has been undermined, not improved, by the import ban. So this is not convincing.

Instead, the continued ban contravenes Article 18(1) of the SACU Treaty, which prohibits customs duties and quantitative restrictions. It also contravenes Article 25(3), which states that “the provisions of [Article 25] paragraphs 1 and 2 shall not be so construed as to permit the prohibition or restriction of the importation by any Member State into its area of goods grown, produced or manufactured in other areas of the Common Customs Area for the purpose of protecting its own industries producing such goods”. The vegetable ban is clearly such a protectionist measure. It is also in contradiction of the trade liberalisation imperatives embodied in the SADC FTA, the AfCFTA and the WTO.

While the SACU Agreement does permit infant industry protection, the mechanism for doing this is through internal tariffs; Botswana currently imposes an infant industry tariff on imports of UHT milk. But it is important to note that imports of protected goods are not banned and can continue, subject to the payment of the internal SACU tariff.

Implementing a trade restriction that is not permitted under international trade agreements that Botswana is party to is certain to elicit “tit for tat” responses from trading partners; indeed there is already evidence that this is occurring¹³. Furthermore, given that long-term

¹² Typically this would refer to arms of war or similar items.

¹³ It has been reported (by the producer) that some Botswana citrus exports to South Africa have been turned back at the border.

competitiveness requires large-scale export production, implementing measures that are in contravention to the trade agreement under which exports will occur are counter-productive.

Box 2: Import Bans and Policy Formulation

The background to the policy formulation process in Botswana is that important national policies are formulated after an extensive process of consultation, including consideration of options, objectives, instruments, possible outcomes, and trade-offs. Governments typically provide a response to the recommendations that come out of this process, and this provides the basis for the national policy, which is typically kept in place for a long period of time. The policy provides the basis for subsequent policy actions and decisions.

The decision to ban vegetable imports was taken without such a process of broad-based consultation, and was inconsistent with the existing policy objective as laid out in the 1991 National Policy on Agricultural Development. It was also not a “smart” policy; it imposed restrictions across a wide range of horticultural/vegetable products, regardless of the potential for long-term sustainability and competitiveness, and was not targeted. Furthermore, it had no mechanism in place for monitoring its impacts, no public data reporting or accountability process, and no process in place for adjustment in the event that policy objectives were not being met (e.g. temporarily lifting the ban in the event that local suppliers could not meet market needs, whether in terms of physical supplies, quality or price). Farmers were given protection regardless of whether they were becoming more productive and competitive over time, hence the policy provided inappropriate incentives.

The review that took place towards the end of the initial two-year ban, prior to its extension in terms of time and broadening in terms of scope, was very limited. Notably, the main consultations that took place were with “beneficiaries” of the ban (mainly farmers) and government institutions, but there were limited or no consultations with those who were negatively impacted, notably retailers, consumers/households and the tourism industry. It was therefore partial and one-sided, and unable to achieve a balanced outcome in terms of national objectives.

The policy also implied a reversal of the long-accepted definition of food security in the country, equating this with food self-sufficiency, in contrast to logic and agreed national agricultural policy.

Balance of Interests and Conclusion

Overall, assessments of measures such as this are difficult to carry out comprehensively. But they are easy to carry out badly. For instance, if consultations on the impact focus on particular actors, such as farmers, politicians and government officials, then the result will be pre-determined. Clearly, domestic farmers benefit from agricultural trade restrictions. But that does not mean it is in the national interest. Other impacted sectors need to be properly consulted (and the failure to consider the highly adverse impact on the tourism sector and on households is particularly serious in this case). Proper consultations are difficult in an exercise like this: beneficiaries (farmers) are easy to identify, but some losers are not (as they are highly dispersed, with all households affected). But their voice, and the impact on them, must not

be ignored. Similarly, macroeconomic impacts on prices, competitiveness and exports must be factored in.

Overall it is clear that this was a badly conceived, badly designed and badly implemented policy, which was in contravention of Botswana's long-standing national Agricultural Policy and the SACU Agreement. No mechanism was put in place to monitor all of the various impacts – notably supply response, price impact, market shortages, quality issues, or impact on other sectors - or to adjust the policy in the event that it was ineffective or had negative impacts¹⁴.

What should be done to develop the agricultural sector further, or at least the horticulture sub-sector?¹⁵ As a general principle, policy needs to be more targeted and focused on long-term competitiveness and both economic and environmental sustainability, not the protection of uncompetitive production. This requires a combination of scale and improved productivity resulting from modern farming techniques and technology (the “backyard gardening” approach is not the answer). Targeted products should fall into two categories.: (i) those where there is a significant local market, where productivity is or can become comparable to regional standards, and where producers are located in reasonably close proximity to consumer markets (to avoid excessive transport costs). The second category is where there is export potential, in order to achieve economies of scale.

Government support should be focused on analysis of markets, production and value chains, supporting high-productivity farming and technological development, not on restrictive trade measures. There also needs to be consideration of water sustainability, noting trade-offs between water use for irrigation and for other economic and social needs. Subsidies should be limited, for instance covering the cost of public goods (e.g. information, research and development, meeting required standards, improving market infrastructure) and start-up costs, not compensation for lack of long-term competitiveness. Government can also help to develop links between producers and retailers, helping the producers to meet required standards for products and packaging, while providing a stable market. Restrictive trade measures should be avoided. Rather than picking a fight with the country's largest trading partner, efforts should be made to benefit from regional co-operation, for instance by attracting FDI into the horticulture sector, technology transfer, and effective management of out-grower schemes by retailers. Trade should be viewed as a facilitator of development, not barrier. Inevitably, a policy based purely on import substitution will lead to higher prices and reduced living standards for households.

¹⁴ For instance, in the second round of import restrictions (implemented in mid-2024), farmers were given six months notice of the new measures, to give them time to get prepared. Mushrooms were one of the newly restricted products. However, six months after the extension of the ban, and twelve months after the notice was given, there was still no domestic production of button mushrooms, which disappeared from supermarket shelves. More generally, there have been many occasions when domestic supply has failed, but there was no relaxation of import restrictions at these times.

¹⁵ The livestock and foodgrain sub-sectors are the most important components of the overall agricultural sector from the perspective of output and employment, but pose different policy challenges.

Summary of Impacts of Vegetable Ban (Direction; Not Quantified)

Aspect	Positive	Negative
Production (output)	X	
Price		X
Imports	X	
Exports		X
Quality		X
Supply reliability		X
Impact on other sectors		X
Real household incomes/poverty		X
Employment	X	
Compliance with trade agreements		X
Food security		X