Bank of Namibia

25TH ANNUAL SYMPOSIUM

Symposium Proceedings' Booklet

AGRICULTURAL GLOBAL VALUE CHAINS FOR INCLUSIVE DEVELOPMENT: HOW CAN NAMIBIA POSITION ITS AGRICULTURE SECTOR?

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Preface

On an annual basis, the Bank of Namibia has held a one-day Symposium dating back to 1999, bringing together experts in the field of economics (internationally and locally) to exchange views on various issues pertaining to the Namibian economy. In 2024, the event was held under the theme: "Agricultural Global Value Chains for Inclusive Development: How can Namibia position its agriculture sector?". Value chains (VCs) are major channels for agricultural development due to their capacity to mobilise resources from various economic sectors, create economic value and generate employment. They offer an operational framework for engaging with farmers, businesses and policy makers to improve income generation in an inclusive and sustainable way. The theme thus aimed to device policies and strategies that will contribute to providing evidence for better domestic policies for the optimal operation of agricultural value chains.

In celebrating the 25th anniversary since its inception, the Bank of Namibia's symposium focused on possible interventions that the country could undertake to increase global participation in the agricultural sector. Given the rising youth population in Namibia and the state of unemployment in the country, the agriculture sector offers the greatest potential for alleviating unemployment. To this end, the theme reviewed the prevailing challenges in the sector and options available to broaden global participation thereby increasing Namibia's integration in global value chains. More specifically, the following questions were key discussion points during the proceedings of 25th annual symposium:

- What measures are needed to increase agricultural productivity in Namibia?
- What are the key stumbling blocks to getting the country to achieve its objectives, and how to scale up technologies to benefit across the entire agri-food chain?
- Identify major constraints for value chain upgrading, including market access restrictions, infrastructure bottlenecks, insufficient resources and institutional gaps
- Reforms needed by the Government to devise clear implementable plans to support physical infrastructure development and achieve a smoother flow of products across the value chain (i.e. better roads and distribution facilities such as storage of products and better communication infrastructures)?
- How policymakers and producers can sustainably address the reality of the ever-increasing temperatures in the country due to climate change (which directly affects agricultural production)?
- Clearly defining upgrading options related to value addition.
- Identifying the most suitable partnerships for upgrading the agriculture value chain in Namibia.
- How to expand entrepreneurship opportunities for increased capacity building and reskilling in the rural areas for agro-industry development?
- And finally, and more importantly, how can we facilitate a thriving agricultural industry in Namibia?

The proceedings of the symposium included presentations delivered by local and international experts and supplemented by a panel discussion. The list of invited speakers comprised of representatives from the Natural Resource Institute at the University of Greenwich in the United Kingdom, the food and Agriculture Organisation, the Ministry of Industrialisation and Trade, the Ministry of Agriculture, Water and Land Reform, Ombu Capital Namibia, the Southern African Development Community (SADC) Secretariat, and the Bank of Namibia.

This booklet is a compilation of all key background documents: including the papers prepared for and presented by the speakers at the symposium, speeches delivered during the event as well as a summary of the key policy issues emanating from the symposium and associated recommendations.

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Welcome Remark

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Welcoming Remarks

by Mr. Johannes !Gawaxab, Governor of the Bank of Namibia

Director of Ceremonies
Honourable Calle Schlettwein - Minister of Agriculture, Water and Land Reform
Honourable Ministers and Deputy Ministers Present,
Members of Parliament,
Members of the Diplomatic Corps,
Executive Directors of Government Offices/Ministries and Agencies,
Deputy Governors and Board Members of the Bank of Namibia,
Distinguished Speakers,
Distinguished Panelists,
Captains of Industry,
Members of the Media,
All invited guests,
Ladies and Gentlemen,

Good morning!

1. It is my profound honour and pleasure to welcome you to the 25th anniversary of the Bank of Namibia's Annual Symposium. On a yearly basis, the Bank identifies a contemporary development and economic issue pertinent to Namibia, to which valuable contributions can provide evidence-based solutions. Before I deliver my welcoming remarks, I want to thank Dr Emma Haiyambo and her team for organising yet another impressive annual symposium. This year's commemorative edition of the symposium is hosted under the theme **Agricultural Global Value Chains for Inclusive Development: How can Namibia Position its Agriculture Sector?** In summary, Global Value Chains entail the various stages of bringing an agricultural product from production to the final consumer. The entire production process, from raw materials to finished products, is carried out wherever skills and materials are available at competitive cost and quality. What this simply means is that, if a country can source raw materials or intermediate goods cheaply from one or more countries, as compared to producing domestically, it would then be beneficial to import.

2. As is widely recognized, healthy, sustainable, and inclusive food systems are critical to achieving development goals, and thus, agricultural development is one of the most powerful tools to end extreme poverty and boost shared prosperity. For instance, a recent World Bank study, published in March 2024, estimated that growth in the agriculture sector is two to four times more effective in raising incomes among the poorest compared to other sectors. For Namibia specifically, agriculture is crucial for economic growth.

Ladies and gentlemen,

3. All developing countries strive to attain high-income status as a crucial milestone for their advancement. Agriculture plays a critical role in transforming economies to reach that goal, along with achieving other essential development goals like ensuring food security and improving nutrition. As a leading sector of many economies, agriculture helps facilitate industrial growth and structural economic transformation. Agriculture plays a multi-dimensional role in the development process, including eliciting economic growth, generating employment opportunities, contributing to value chains, reducing poverty, lowering income disparities, ensuring food security, delivering environmental services, and providing foreign exchange earnings.

4. Therefore, in order to end hunger and malnutrition while accelerating economic growth, agricultural transformation must become a reality. One way we can transform the agriculture sector is through Agricultural Global Value Chains (AGVCs). Literature has shown that there is an immense benefit to integrating agriculture into the global value chains. Integration into GVCs could be in the form of exporting products, importing inputs for production, and backward and forward linkages with foreign-invested firms to optimize international business strategies and enhance productivity. It has been shown that nations that adopt AGVCs experience accelerated economic growth, gain access to expertise and technology, and improve employment opportunities. Through AGVC-driven development, countries grow by transitioning to more advanced tasks and incorporating more significant levels of technology and expertise across different sectors.

5. However, price shocks and the Covid-19 pandemic which constrained access to key agricultural inputs coupled with growing geopolitical tension has further worsened food insecurity, while also underscoring the risks associated with globalization. GVC participation thus presents countries with challenges, which include more income inequality and heightened exposure to imported shocks and risks (due to dependencies on foreign partners, sourcing challenges, market concentration of critical inputs or stages of production, and new types of technology and intellectual property vulnerabilities). The resilience of smallholder farmers and small and medium enterprises had already been put to the test by the COVID-19 pandemic, coupled with the elevated fertilizer prices observed in the last few years.

6. It is essential that policies for responsible global value chains consider challenges faced by vulnerable farmers, including through adequate support measures. Otherwise, smallholders and small and medium enterprises, particularly in developing countries, may face difficulties meeting GVC participation requirements and maintaining their access to traditional export markets. So, the question becomes, how do we become resilient to these shocks and vulnerabilities while integrating further into GVCs? Because, as highlighted and as you will see during today's deliberation, the benefits of integration outweigh the costs. And as a semi-arid country, it would be beneficial for Namibia to supplement its produce with raw materials or intermediate goods from other countries and to build local industries.

7. An OECD (2021) study on jobs for rural youth explores the extent to which local food economies could respond to the employment needs of youth in seven developing countries at different stages of development, including Namibia. The study finds that the food economy makes up an important share of total employment, especially in low- and lower middle-income countries, where it ranges from around 50% to 90%. Young people (aged 15-29) make up 45% of the labour force on average and mostly work in the agricultural production segment. In middle-income countries, however, the food service segment represents a large share of youth employment in the food economy. In Namibia, 24% of total employment are in the food economy, with 41% of these jobs held by youth between the age of 15 and 29. Among employed youth, 28.3% work in the food economy as their primary job. Agriculture production still constitutes the largest share (49%) of jobs for youth in Namibia within the food economy sector, followed by the food-service sector (26%).

8. Agriculture has always been seen as something to fall back on when life doesn't go your way. If we want to solve the high youth unemployment in the country, we need to change this mindset. But that also means that we need to empower the youth to want to go into Agriculture; the biggest stumbling block here becomes productive land on which to farm. There should also be training available as well as support in value addition, packaging, marketing, and sales. So, the question that begs the answer is, how do we make agriculture "glamorous" for the youth to want to venture into?

9. Furthermore, the importance of trade cannot be overstated. According to the World Bank, trade is an engine of growth that creates jobs, reduces poverty, and increases economic opportunity. According to a report published by the African Export-Import Bank in June 2024, intra-African trade increased by 7.2% in 2023, reaching $192 billion. The report, titled "African Trade Report 2024: Climate Implications of the AfCFTA Implementation," highlighted that intra-regional trade accounted for 15% of Africa's total trade in 2023, up from 13.6% in 2022. We, therefore, as a country have an opportunity to increase this trade by using the opportunities offered by AfCFTA – in fact, we feel that intra-Africa trade is so important that we had a symposium on it in 2021 and various options to expand trade within the region were offered.

Ladies and gentlemen,

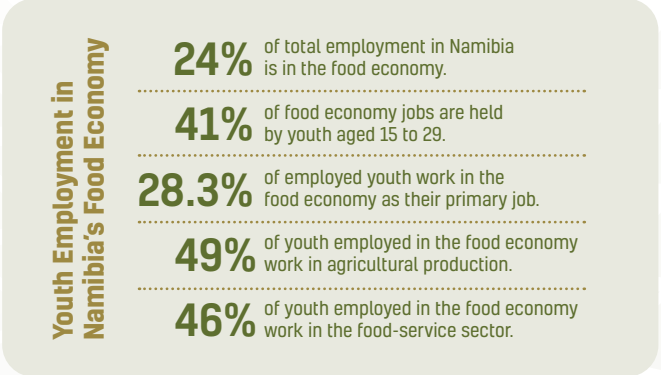
10. In a country where more than 70 percent of the population's livelihood depends on agriculture, there is a need to make sweeping reforms to support growth in the agricultural sector. Part of these reforms is empowering farmers through access to finance and providing support through infrastructure development for storage, processing, quality testing, and value-addition. Financial Inclusion provides farmers with economic empowerment, enabling participation in the market, growing and upscaling their businesses, increasing income and savings, coping with emergencies, and meeting their obligations, both socially and economically. These translate into greater participation and contribution to the economy in terms of value addition, output/Gross Domestic Product (GDP), as well as reducing the government's social welfare support and fiscal burden. With increasing climatic conditions, the financial sector should be able to support and buttress our agri-sector, including ensuring its reliance and the adoption of smart technology.

11. A closer look at the importance of AGVC underpins several factors, and there are three things I want us to reflect on. Firstly, we need to increase the **speed and quality of innovation**. Agri-tech services are reshaping the agriculture and food sector by enabling sustainable farm operations and efficient supply chains. While adoption of genetic science and water- and soil-management technologies may continue to grow on larger farms, adoption by smallholders in emerging economies remains a challenge. The world is changing, and innovation is the fastest way to fast-track these changes. The agricultural sector has the potential to undergo a rapid and positive transformation into a sustainable, climate-resilient industry. By embracing regenerative agriculture systems, we can significantly enhance productivity, decrease carbon emissions, promote adaptation, and safeguard our land resources by improving soil health, nurturing biodiversity, and optimizing water retention.

12. Secondly, the **quality of partnerships** is a critical aspect as well. Our agri-food value chains are complex; be it from the field to the farmgate or from the factory and market to our plate. We do not need partners that are providing us with their lowest-quality materials, while keeping the best for themselves. But rather, we need trustworthy and consistent partners that will supply Namibia with A-grade products that will put Namibian products on the map.

13. Thirdly, and a very important one: **farmer-centricity**. All these ultimately start with our farmers. We can't fix anything without them. Our farmers need a favourable environment that allows for innovation and increased collaboration. That is, our role as policy makers – working with farmers to balance their position in the value chain and allow for better impact. For instance, how do we move from a seller to farmer business model to effective new business models where farmers are in a position to spearhead the change? This will and should disrupt our value chains' way of doing business and involve farmers to help drive sustainable consumption and production.

14. It goes without saying that these three aspects require financial backing, especially for smallholder farmers who have limited resources to allow for choice of crops and livestock, as well as links to markets and other key dimensions to sustainably integrate into the value chain. As such, **solutions regarding access to finance need to better understand the various profiles of participants and the conditions and market context in which they operate.** To this end, the Bank of Namibia see merit in an ecosystems approach to agricultural development through holistic investment, including tailor-made financing tools considering the variability and or vulnerability of the sector, is critical to better support participation in AGVC.



Director of ceremonies, ladies and gentlemen,

15. My remarks are not aimed at pre-empting the discussions and ideas that will flow from the discussions during this Symposium. They are not to create an impression that the Bank knows and has all the solutions. But rather, this platform offers all of us the opportunity to collectively reflect, scrutinise and deliberate on this important topic, particularly around identifying ways of greater integration into the world. In this regard, I would like to suggest a few reflections for the consideration of the experts on this subject, as well as those of us who are policymakers or practitioners with impact in this sector, and all participants in this Symposium.

- What measures are needed to increase agricultural productivity in Namibia?
- What are the key stumbling blocks to getting us where we want to be, and how do we scale technologies for their benefits to trickle across the entire agri-food chain all the way to the consumer?
- We need to identify major constraints for value chain upgrading such as market access restrictions, weak infrastructures, lacking resources and institutional voids
- What can the Government do to devise clear implementable plans to support physical infrastructure development and achieve a smoother flow of products through the value chain (better roads and distribution facilities such as storage of products and better communication infrastructures)?
- How should policymakers and producers sustainably address the reality of the ever-increasing temperatures in the country caused by climate change which affects agricultural production?
- We need to clearly define upgrading options related to value addition.
- Also, key is to identify the most suitable partnerships for upgrading the agriculture value chain in Namibia.
- How do we expand entrepreneurship opportunities for increased skills in the rural areas for agro-industry development?
- And finally, and more importantly, how can we facilitate a thriving agricultural industry in Namibia?

Director of ceremonies, ladies and gentlemen,

16. Of course, we remain cognisant of externalities that are sometimes not of our own doing. In as much as agricultural reliability and sustainability are of long-term importance for economic development, **challenges raised by climate change require accelerated adoption of practices and technologies to improve agriculture sustainability and climate resilience**, especially those that can simultaneously deliver multiple benefits, such as diversification and integrated soil fertility management. For Namibia specifically, climate change is forecasted to intensify water stress, droughts, and agricultural insecurity. As we deliberate on increasing GVC participation in the agriculture sector, it is imperative that we improve our understanding of these barriers with the view to ultimately come up with innovative policy interventions to overcome them, even more so as our population is now twice as large as at independence.

Director of ceremonies, ladies and gentlemen,

17. The Annual Symposium of the Bank of Namibia aims to contribute to Namibia's development and economic policy discourse. As customary, the lineup of our symposium brings together a wide and impressive range of distinguished experts, decision-makers, and representatives from the private sector, all of whom I would like to thank for availing themselves to make this event a success. This forum is designed to bring together policy experts, academics, and economic development stakeholders to discuss pertinent economic and policy issues.

18. In closing, I would like to leave you with the words of Dr. Posh Raj Pandey, a trade and development expert:

> "To realize the full potential of global value chains for inclusive development, governments, businesses, and international organizations must collaborate. By fostering diversification, upgrading, sustainability, regional cooperation, and sound domestic policies, we can harness the power of GVCs to create a more equitable and prosperous world for all."

With those few remarks, ladies and gentlemen, I thank you and welcome you all to the 25th instalment of the Bank of Namibia Annual Symposium!

02

Keynote address

02

Keynote address

- by: Hon Calle Schlettwein, Minister of Agriculture, Water and Land Reform

Hon. Ministers and Deputy Ministers,
Mr. Johannes! Gawaxab, Governor of the Bank of Namibia
The Representative of the FAO,
The Representative of the UNDP
Members of the Diplomatic Corps
Distinguished Speakers,
Senior Officials from the Government and the Bank of Namibia,
Distinguished Invited Guests,
Agricultural and Farmers Unions
Captains of Industry.
Members of the Media,
Ladies and Gentlemen

1. What an auspicious occasion for me to address you at this 25th Anniversary of the Annual Symposium, themed "Global Value Chains for Inclusive Development: How can Namibia position its Agricultural Sector"? This thematic choice is timely and derives its relevance from the centrality of agriculture as a pathway for food self-sufficiency, inclusive growth and social transformation, supporting long-term prosperity for all Namibians.

2. I am delighted that this year's symposium has rightly elected to zero-in on the role of agriculture and agro value chains as formidable pathways to deepen the quality of growth by drawing the majority of Namibians into mainstream economic activity while enabling food security for all. The acclaimed high priority must well be engendered in the Sixth National Development Plan (NDP VI).

3. Over the last two decades, world trade and production have become increasingly organised around Global Value Chains. Global Value Chain related trade, rather than conventional trade, has a positive impact on investment, productivity, income per capita and economic performance. However, industrialised economies gain more benefits from Global Value Chain than developing countries due to organised production, division of labour and high technology operations.

4. Kowalski and others (2015) identify geography, size of the market, and level of development as the key determinants of Global Value Chain participation. Trade and investment policy reforms as well as improvements of logistics and customs, intellectual property protection, infrastructure and institutions also play an active role in determining Global Value Chain participation. This should be our departure point for Namibia's agriculture sector participation in Global Value Chains.

5. Namibia's macroeconomic outlook is positive, with steady headline growth numbers projected for the medium to long-term horizon. This is thanks to the anticipated activity in oil and gas, Green Hydrogen and the demand-driven critical raw minerals to fuel future industries. Unfortunately however, we have historically come to contend with the fact that respectable headline growth has disappointingly co-existed with stubbornly high unemployment, sluggish per capita income, high poverty and high income inequality rates.

6. We start from the premise that agriculture, both commercial and subsistence, is a direct and indirect source of income and livelihoods for a significant share of the population, estimated at about 70 percent of the population. This is an attestation that broad-based growth in the sector impacts positively on the quality of life, jobs, prosperity and social transformation for the majority of people in Namibia:-

7. The sector contribution to GDP amounts to an average 6 percent over the past five years, and as the sector contends with the impact of climate change, volatility in monetary policy and variable industry growth, real growth averaged 4.6 percent over the same calendar. It is showing some resilience defying the adverse impact of COVID-19 on the economy, holding growth steady and enabling the country to build back better.

8. Direct employment in the agricultural sector is estimated at approximately 20%, the single most important sector in terms of the job content with less skills demand, hence the high potential for inclusion and erosion of poverty through growth in the sector. Adding the food sector the percentages edge towards 50%.

9. However, bouts of volatility in growth rates, coupled with the trade-related impacts of global geopolitical tensions of our times, have now warranted a policy shift from over-reliance on rain-fed agriculture, to intensive agriculture, thus de-risking the sector from climate change and variability.

10. There is, therefore, a compelling case, tested across the generations, that the agricultural sector stands the best chance to induce a high dimension of inclusion and social progression through:

- boosting national food security and food self-sufficiency through increased agricultural modernisation, increased productivity and production,
- improve competitiveness and production in the livestock value chain targeting the export markets'
- development of agricultural production and commensurate value chains for high yielding horticultural products,
- job creation, given the sector's high employment intensity,
- poverty reduction potential through the generation of per capita income for individuals and households, and
- erosion of income inequalities through land reform and wealth-based empowerment opportunities.

How can we better utilise the agricultural potential of Namibia

11. The frontiers for inclusive growth in the agricultural sector are scalable through the value chain approach, from farm to fork; that is, from the primary activities of production to preservation, processing, distribution and marketing. The sector can singularly crowd-in a large number of people, with less skills complexity. Significant value and high job content are realised through the production of final consumer goods, development of value chains and increasing farmer and local participation in the value chains and value shares.

Key Prerequisites for Repositioning the Sector

Director of Ceremonies,

12. This symposium brings to the fore practical strategies on how best to position the agricultural sector in the domestic, regional and global value chains. Taking into account Namibia's agronomic and climatic conditions, specific prerequisites have to be secured as a basis to successfully anchor the sector into the value chains map. These primary policy enablers are:

First, meaningfully recognising agriculture as a national priority and according such priority through deliberate resource allocation across all facets of the value chain. At 2.3 % of total non-interest expenditure, and about 0.7 percent of GDP in 2024/25, budgetary allocation to agriculture fall far short of recognising agriculture as a high national priority, a matter which must urgently be aligned.

Second, investment in water resource development, distribution infrastructure and sanitation with the objective of providing secure, reliable and affordable water supply required for the transition from rain-fed agriculture to intensive and climate smart agriculture, thus re-risking the sector from climate change and variability. An allocation of about 1 % of total non interest expenditure is grossly insufficient to support both SDGs for food and water security and must be significantly improved.

Third, investment in primary, logistical and supportive infrastructure to address supply-side challenges and product quality considerations. These range from abattoirs, processing plants and feedlots in the livestock sector to grain and cold storage infrastructure for fresh food and marketing hubs in the agronomic sector and IT infrastructure.

Fourth, provision of consistent and broad-based support services, particularly the veterinary, agricultural extension services and a targeted national subsidy program on the back of a robust research and development program, digitalisation of some of the services and mechanisation of production systems.

Fifth, secure, affordable and reliable power provision. Power and water availability and affordability are key input factor for the fortunes in the sector. Our experience is that the cost of energy often rockets out of affordability range for farmers, particularly for the small scale farmers. This binding constraint limits increasing returns to scale and productive diversification in the sector.

Sixth, diversifying market access to achieve economies of scale and expansion of the domestic productive capacity.

Some Impediments

13. Namibia has gone at great length to invest in some of the above prerequisites, setting the basis for leveraging regional and international value chains. This had the effect of addressing domestic supply-side constraints across the value chains and to promote access to domestic, regional and international markets. However, let us pause briefly and take stock of some of the glaring impediments.

14. The small market size of Namibia is providing little advantage in terms of economic scaling. At the same time producers have to bear high transport, logistic and input cost due to long distances to and from markets. Competitiveness with regional global producers severe. The SACU arrangement perpetuates Namibia as a captive market for South African finished products (such as food) and agricultural inputs, while at the same time it hinders Namibian ambitions to industrialise. Currently still about 70% of all consumables in Namibia are imported from South Africa. Current trends show a deceleration of agro processing.

15. Public industrialisation and marketing entities that were created with the correct intent to facilitate an economic transition towards value chain development and industrialisation in the agricultural sector, without exception, failed to deliver. MEATCO, AgriBusDev, AMTA, AgriBank, NIDA, all had the mandate to support farmers and entrepreneurs, but unfortunately became a burden to them instead. Serious uncompetitiveness and mismanagement created financial constrains, which were rolled onto their farming clientele.

16. The financial service sector (banks and insurances) remained a risk adverse and most expensive service provider to entities in the agricultural sector. Further, the financial services industry product offerings to the sector are not the most tailored and not the most inclusive and broad-based due to adverse selection. The absence of a sustainable targeted agricultural subsidy program nationally coupled with the absence of tailor-made financial service offerings and, at times, the moral hazard problem, tend to leave the farmer saddled with debt.

Food Self-sufficiency, Market access and policy interventions

17. Notably, market access is a key pivot for agricultural products. One distinct advantage for the Namibian agricultural sector is access to the best paying markets regionally and globally, thanks to investment in core enablers and the upkeep of sanitary and phytosanitary standards. This unfettered market access is in respect of not only Africa but also to the European Union, United States and China, both for livestock and crop products. A month ago, Namibia signed a further bilateral agreement with China for the export of small livestock products, in particular for sheep and goats; while pursuing finalisation of a similar wide-ranging bilateral arrangement for high-value fruits; grapes, dates and blueberries.

18. In essence, we discern FOUR key entry points for positioning domestic producers to better leverage value chains in the sector and realize increasing value shares.

19. The first entry point regards the domestic value chain in the livestock and agronomic sub-sectors. For the livestock sub-sector which is the mainstay for the majority of Namibian farmers, the existence of excess market demand is a favourable opportunity to improve domestic livestock productive capacity and to transform the sub-sector from a producer of raw materials to an exporter of finished livestock products by servicing these best paying markets with finished or intermediary goods. This requires that registered abattoirs are put to productive use, value chain industries such as meat processing plants and tanneries are harnessed, veterinary services are efficiently provided, and the public sector institutional capacity is improved to serve the sector better.

20. At this point in time, co-funding of value chain nodes with the support of the European Union under the Livestock Support Program, encompassing feedlots, artificial insemination centres, processing facilities and expanded market access schemes is underway to enhance efficiency mechanisms in the livestock sub-sector. The objective is to crowd-in producers, most specifically small-scale producers and women and youth farmers, into livestock value chains with market integration into regional and global value chains.

21. This is notably in addition to the Government investment in achieving disease free status for the whole of Namibia and the resulting shifting of the VCF northward. Also, the abattoir, processing and marketing infrastructure outlay in the Northern Communal Areas, enabling commodity-based trade and market access for a significant portion of the population north of the veterinary cordon fence. As such, through commodity-based trade, market access for NCA livestock farmers is achieved not only for south of the veterinary fence, but also to specific African and Middle East market destinations. With lucrative market access secured, backward linkage mechanisms to the smallest producers must be enabled to work, with increasing returns to scale for value chain players.

22. Poultry and pork value chain schemes are promoted through input subsidies and market promotion scheme respectively to enable domestic players in these sub-sectors to realise gains and market share with significant domestic job content and revenue gains. The Poultry Value Chain Development Scheme has particularly rendered itself highly employment intensive through high multiplier effects, enabling more domestic market oriented flows, increasing value shares and more jobs.

23. In the agronomic sector, the policy objective is to achieve scaled up productive capacity for basic grains and cereals as basic staple food for food self-sufficiency, while allowing for diversification into high-value fruits, horticulture products and crops. Such productive diversification and intensification extend well beyond the government-owned green schemes to include commercial and communal farming practices in the country. The Ministry continues to support agronomic producers through the Horticulture Support and Value Chain Development Scheme, focusing on technical capacity building and equipment support interventions.

24. It is well-known that the government has invested in the Green Scheme Projects with the objective of securing at least 27,000 hectares of land under irrigation, while developing similar strategic projects such as the Hardap irrigation scheme. Considered alone, the schemes are sufficient to enable the country to achieve self-sufficiency in basic staple foods once effectively utilised. The domestic private sector, agri-entrepreneurs and financiers are called upon to take advantage of these opportunities.

25. There is substantial empirical evidence and market experience about input and product subsidies in the agricultural sector, regionally and globally. Inasmuch as subsidies may have distortionary effects on prices, the Namibian agricultural sector and its nascent industries cannot withstand the uneven playing field in the global market for agricultural products, including those from advanced and emerging market economies, which are highly subsidised. We should, therefore, master the capacity to scale up the national subsidy program, beyond the current discrete and under-funded, small incentive packages with limited outreach. The coming online of new industries of oil and gas as well as the Green Hydrogen, present opportunities for significant participation through local sourcing.

26. Secondly, regional value chains through the SADC and the African Continental Free Trade Area, provide diverse entry points for the Namibian agriculture sector. Namibia has a distinct, perfect advantage of being wedged between the sizeable economies of South Africa and Angola, providing effective demand for agricultural products. The African Continental Free Trade Area provides sizeable market access and opportunities for productive diversification in the sector, beyond the existing capacity of the domestic producers. This is in addition to market access agreements which Namibia is party.

27 Thirdly, Namibia as a logistics hub for the sub-region is competitively poised to better harness global value chains in the sector. Being a gate way to land-locked SADC and international markets, Namibia is a natural epicenter for market agglomeration, assembly and processing of final consumer goods through importation of raw materials. This has further multiplier effects in the domestic economy and enable domestic industry players to participate in the global value chains setting.

Conclusion

28. To fully exploit the tremendous potential of real economic growth agriculture and its strategic role must be recognised. It must be based on creation of an enabling environment that treats the land with respect, adequate financial provision, environmental sustainability, which support farmers better.

29. Let me conclude by stressing that repositioning our agricultural sector in the domestic, regional and global value chains requires us to enhance policy cohesion and support mechanism to shore up productive capacity and competitiveness within public and private entities.

30. Indeed, local economic development and wealth creation are greatly optimised not only through increasing participation of domestic producers and small holders in the value chains, but also assuming increasing value shares across the chains. These are critical imperatives for the medium to long-term policy to elevate the role of the sector in the economy and achieving shared prosperity, thus eroding poverty and income inequalities through inclusive growth and more jobs.

31. I am confident that through the assemblage of the expertise gathered here today, this symposium would contribute to a range of innovative proposals for policy options.

32. I wish you successful deliberations and look forward to the outputs from this annual platform.

03

Overview of global value chains in Namibia: The case of the Agricultural sector

03

Overview of global value chains in Namibia: The case of the Agricultural sector

By Dr. Bernie Zaaruka
Economic Advisor, Bank of Namibia

Charlotte Tjeriko-Katjiuanjo
Senior Economist, Bank of Namibia

[Presented by Dr Emma Haiyambo]

I. Introduction

1. This paper aims to assess the status of Namibia's integration in the Agricultural Global Value Chains (AGVCs) and explore potential options to expand the country's participation. AGVCs, or global value chains, are a potent force that drives productivity growth, job creation, and improved living standards. Therefore, the paper analyses the current landscape of agricultural value chains in Namibia while exploring challenges and opportunities for industry growth. The paper proposes possible policy interventions to support the country's integration into the AGVCs.

2. Agricultural value chains encompass the various stages of bringing an agricultural product from production to the final consumer. The entire production process, from raw materials to finished products, is carried out wherever skills and materials are available at competitive cost and quality. Agricultural raw materials may cross borders multiple times before reaching consumers, embedded in intermediate and processed goods. The agriculture sector mainly participates as a supplier of raw materials in value chains. Accordingly, food production has become easier, quicker and more accessible due to interconnected global agricultural value chains and a sharp increase in the demand for food.

3. Considering the international fragmentation of production, participation in AGVCs can lead to increased job creation, industrialization and economic growth. Nations that adopt AGVCs experience accelerated economic growth, gain access to expertise and technology, and enhance employment opportunities. Through AGVC-driven development, countries grow by transitioning to more advanced tasks and incorporating more significant levels of technology and expertise across agriculture, manufacturing, and service industries. Literature shows a large and significant effect of AGVCs fast-tracking countries' development process.

4. These AGVC processes have important implications for international trade and food security. Increased demand for high-value products and increasing prices in international food markets create opportunities for developing countries to realize economic growth through expanding and diversifying their agricultural exports. High-value agricultural exports entail an important potential for raising rural incomes and reducing poverty because of the high intrinsic value and labour-intensive production systems[1]. To benefit fully, countries must adopt appropriate trade and investment policies.

5. The AGVCs encounter various obstacles that impede their efficiency and effectiveness. Key challenges include navigating complex and conflicting regulations, trade barriers disrupting product flow, financial constraints hindering access to capital, high transaction costs, inadequate storage facilities causing losses, limited adoption of modern technology by farmers, weak market connections impacting sales, price volatility affecting incomes, the need for training programs to enhance productivity, gender inequality in resource access, climate change threats to productivity, and the challenge of balancing sustainability with growing food demand.

6. Namibia has several agricultural value chains, although only a few are geared towards the export markets. Namibia's agricultural value chains are still in a nascent phase, with most exports of agricultural products remaining in raw form. Currently, the country is a net exporter of fruits mainly exported to neighbouring South Africa. A breakdown of the current fruit exports indicates that 62 percent are mostly table grapes destined for the European Union market, the United Kingdom, South Africa, the United Arab Emirates, Canada, and Malaysia[2]. Similarly, Namibia is a net exporter of beef, which is exported to the European Union (54 percent), South Africa (19 percent)[3], the United Kingdom (12 percent), China (8 percent), and Botswana (1 percent) . Previously, Namibia could export beef to the United States of America (USA) until 2020; however, due to stringent measures imposed by the USA, beef exports to this market have since been halted.

7. Organisation breakdown of the paper. Following this introductory section, the rest of the paper is organized as follows: section 2 examines the current landscape of agricultural value chains in Namibia, looking at production, constraints as well as exploring opportunities, while section 3 explores Namibia's participation in Global Value Chains by analysing trade agreements and Namibia's exports. Section 4 outlines the agricultural policy framework in Namibia, while section 5 examines the challenges within the agricultural value chains. Section 6 outlines the conclusion and policy recommendations.

[1] https://openknowledge.fao.org/server/api/core/bitstreams/826f30d8-8ece-4d74-9414-fbe69fcff116/content

[2] Namibia Agronomic Board, 2023.

[3] 2023 figures from Livestock and Livestock products Board

II. Overview of the Namibian Agricultural Value Chains[4]

8. In this section we provide an overview of the current agricultural value chains, from the farm level to the marketing of finished products. A value chain analysis in agricultural development helps to identify weak points in the chain and identify actions that should be to add more value[5]. Through mapping and analysing natural product value chains, it is possible to identify constraints, upgrading opportunities, new routes to market and knowledge gaps[6]. These value chains were chosen because they form part of Namibia's top exports and have potential for greater integration in agricultural global value chains.

2.1 Animal value chains

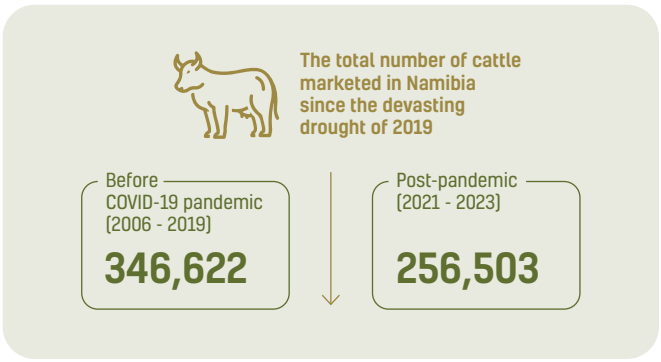
2.1.1 Beef value chain

9. The Namibian beef value chain is a complex one, given the diversity of products and markets served. The key differentiator that drives this complexity is animal health status that in turn determines the eligibility of products for export to markets such as Norway, United Kingdom and the European Union, as opposed to regional markets or to provide for local consumption where standards demanded are not as prescriptive. The beef value chain has several players involved which include Cattle Farmers/Producers, Auctioneers and Traders, Collectors and Transporters, Abattoirs, Processors, Butchers and Informal Beef Traders, Distributors and Consumers.

10. The Namibian beef value chain has three distinctive value chains. The first one is cattle production for live and on-hoof exports. The second is the cattle production marketed to Class A abattoirs for beef exports and local markets. The last value chain is cattle production marketed to Class C abattoirs for the local market[7]. However, within these classes, subclasses distinguish meat quality from old/young or fat/lean.

a) Production

11. The number of cattle marketed in Namibia has decreased since the devasting drought of 2019, exacerbated by the COVID-19 pandemic and has yet to return to pre-pandemic levels. The total number of cattle marketed in Namibia before the COVID-19 pandemic averaged 346,622 between 2006 and 2019, while post-pandemic (2021 – 2023), cattle marketed averaged 256,503 (see figure 1, appendix). The decrease in cattle is particularly noticeable in those slaughtered for export, a reduction from 129,735 in 2019 to an average of 60,000 between 2020 – 2022, although an uptick is seen in 2023 with 104,549 cattle slaughtered for exports. This decline is attributed mainly to the devastating drought of 2019, during which farmers had to sell off much of their cattle. Notwithstanding this, the stock of cattle has been increasing steadily despite the drop from 2016 to 2020 (see figure 2, appendix). The continued decline of cattle marketed could thus be attributed to farmers still restocking.



12. Providing sufficient production volumes to align with available processing capacity remains one of the critical challenges facing the Namibian beef value chain. Meatco has a capacity to slaughter 120,000 cattle per annum, however the actual numbers slaughtered over the last four years (2020-2023) has been less than 50,000 per annum, with 36,861 cattle slaughtered in 2023[8]. Previously, Meatco slaughtered approximately 100,000 cattle per annum, with the highest recorded in 2019/20 financial year, where it slaughtered 116,000 cattle. While Beefcor, with a slaughter capacity of 60,000 cattle per annum can fully utilize this, with slight declines in certain months. Similarly, Namibia exported approximately 17,000 tonnes of beef in 2023[9], while its closes competitor, Uruguay (in terms of size of country and similarities) exports approximately 50,000 tonnes monthly[10].

[8] https://www.meatco.com.na/files/files/Meatco_%20Intergrated-Annual%20Report-20230807.pdf

[9] https://nammic.com.na/wp-content/uploads/Library/Trade%20and%20Marketing/Statistics/Monthly/Commentary/2023/LLPBN%20Stat%20Commentary-%202023%20.pdf

[10] https://uruguaymeats.uy/en/uruguay-bullish-about-gcc-beef-and-lamb-export-prospects/#:~:text=According%20to%20the%20Institute's%20statistics,figure%20for%20the%20country's%20beef

13. The decline in annual production numbers of cattle places greater pressure on the processing sector to secure sufficient raw materials and processes to market specifications. The decrease in production throughput to processors is partially due to a shrinking commercial cattle herd. This points to a need for increased off-take of cattle from the communal areas. The industry faces drought, transboundary animal diseases, and bush encroachment. These factors have led to fluctuations in production levels. However, the Northern Communal Areas remains with the highest cattle numbers and markets for these animals should be explored. The first consignment of Namibian beef from the Northern Communal Areas was sent to Ghana in 2022, while they were halted from September 2023, exports have since resumed in June 2024.

b) Processing

14. Namibia's beef processing industry is well-developed and plays a significant role in the country's economy. The Meat Corporation of Namibia (Meatco) is the largest beef processing company in the country, operating several abattoirs and processing plants to ensure high quality and hygiene standards. Other beef players in Namibia are Beefcor, which was established in 2014 and Hartlief, one of the oldest in the country was founded in 1946 by Karl Hartlief as a small family butchery in Windhoek. A new player in the market, Savanna Beef Processors Limited, is being established by the Beef Value Chain Forum (BVCF) to enhance Namibia's beef processing capacity and target export markets. Abattoir utilization rates can fluctuate due to factors such as drought, which affects cattle availability. For instance, during periods of severe drought, the number of cattle available for slaughter decreases, impacting abattoir operations.

c) Marketing

15. Namibian beef's unique qualities and sustainable production practices should be publicized to build brand loyalty. Namibian beef is known for being hormone-free and antibiotic-free, raised on natural rangelands. The industry's commitment to strict animal welfare and traceability standards is unwavering, contributing to its reputation for high-quality beef and sustainability. Despite challenges such as drought, land degradation, and high production costs, the industry is well-positioned to meet the global demand for high-quality beef, presenting opportunities for growth.

d) Key challenges and constraints

16. Access to domestic and international markets for smallholder and/or communal farmers remains a major bottleneck due to a lack of market infrastructure, including abattoirs. In many cases, smallholder farmers are forced to sell their products at low prices or in extreme cases having to donate because they cannot find buyers. This situation discourages small farmers from producing more than what they need for own consumption.

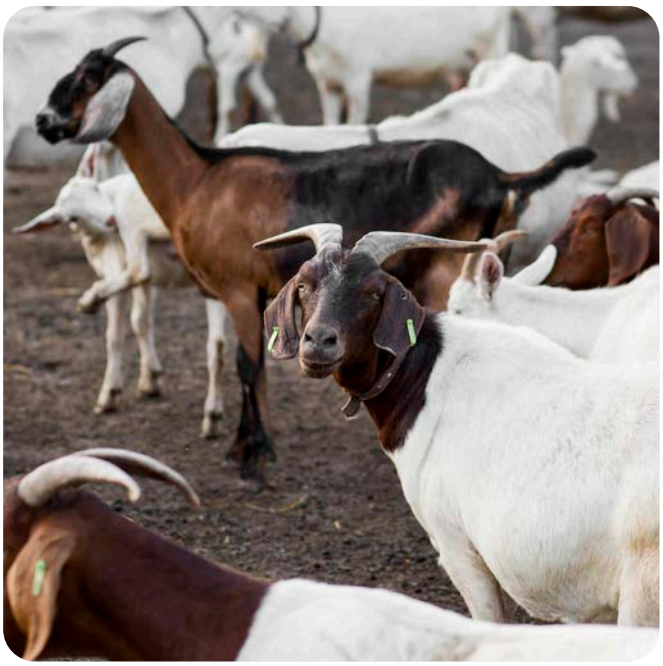
17. A lack of access to feed inputs due to inadequate domestic feed production and high input procurement costs, as well as high utility bills, are key challenges for beef production. There is a need to improve feedlots, feed production, and ensure competitive procurement of production inputs. The cost of doing business for producers (water, electricity, operations, and maintenance of equipment/facilities) are high and persistently on the rise.

2.1.2 Small stock - sheep and goats

a) Production

18. Regarding geographical farming operations, the southern and western parts of Namibia are used for small-stock farming due to the climatic conditions. This semi-arid area lies between true desert to the west and savanna woodlands to the east and north. Currently, small-stock agriculture remains a significant farming system practised mainly in the lowlands of western parts of the country, which is ideal for goat farming and in the rolling plains of southern Namibia, which is most suitable for extensive sheep grazing. The main environmental resource that makes small-stock farming possible is the presence of relatively abundant shrub vegetation[11].

19. Small stock marketed has been on a downward trend since the early 2000s. Small stock marketed has been on a downward trend since 2003, with export abattoirs showing the highest decline (see figure 3 in appendix). The sharpest decline was observed in 2020, owing mainly to the closure of the Mariental-based Farmers Meat Market Mariental, a small stock abattoir and processing, due to the devasting impact of the 2019 drought. This notwithstanding, the abattoir has since resumed operations in October 2023.



[11] http://the-eis.com/elibrary/sites/default/files/downloads/literature/Farming%20systems%20in%20Namibia%20Part%203.pdf

2.1.3 Poultry

a) Production

20. Namibian poultry production is on the rise, benefitting from implementation of the market share promotion scheme. Poultry production has been increasing steadily, reaching 33,890 tonnes in 2023 (see figure 4, appendix). According to the market share currently in force, importers are permitted to externally source products outside the country after sourcing at least 35 percent of their annual merchandise or goods locally. The scheme initially made provision for the importation of a maximum of 600 tonnes of poultry products per month, which was increased to 900 tonnes on 1 November 2013 and further to 1500 tonnes on 15 May 2015 (notice 79/2015). This measure was instituted as an interim intervention to allow the local industry to grow by capturing the Namibian poultry consumption market as well as to protect the poultry industry against dumping and unfair trade[12]. However, the Government Notice No.7132/2020 repealed the interim measure and established a limit of 1200 tons of poultry products per month that may be imported into Namibia to meet the excess local demand.

21. Poultry production is expected to be further augmented with the construction of the new private owned poultry farm in Okahandja. The project, which is expected to start operating in October 2024, aims to produce 400 tonnes of poultry per month after completion. The project also anticipates exporting poultry, upon reaching 800 tonnes per month, over time. Feed is the highest input cost into poultry production, comprising about 70 percent of the total cost. The major inputs into the feed complement are maize and soja, which are mainly imported. Other large input costs are utilities such as electricity and water as well as labour costs[13].

2.1.4 Hides and skins

a) Production

22. Namibia tanneries currently process about 260 000 cattle hides per annum. This comprises 123 000 hides imported (such as from South Africa & Botswana) with the balance (137 000) produced locally. In addition, Namibian tanneries are processing over 930 000 skins per annum. There are two key players in the processing of hides:

- Meatco Tannery; and
- Nakara Tannery and Leather Goods.

23. Meatco tannery processed hides up to the wet blue state for export while Nakara exports leather and manufactured leather products. Key export markets for Namibian leather are Italy and China. About 60 percent of the cattle hide in the local market are categorized as unsuitable for export due to sub-optimal quality, and the cattle branding that is done in the country which further damages the quality of the hides. Moreover, hides produced in rural areas are not being optimally utilised, as they go to waste and obtain low prices in the informal markets.

24. A large number of beef cattle are slaughtered outside the formal abattoir sector; therefore, the hides produced do not form part of further beneficiation or value adding. Following investigation, it became evident that the quality of hides produced from informal slaughtering appear to raise concern. It seems that the raw hides being produced are not being processed to their maximum potential. The local training and education capacities regarding hides were also assessed as not adequate for enhancing training and skills development research and development, and efficient commercialisation of services.

2.1.5 Diary

a) Production

25. The Namibian dairy industry plays a significant role in the country's economy, particularly with regards to employment. According to the Namibia Agricultural Union (NAU) in 2021, the industry provided jobs for approximately 1500 individuals. Recognizing its importance, the Namibia Industrial Development Policy of 2012 designated the dairy sub-sector as a crucial and strategic component in securing the nation's food security aspirations.

26. Milk production has been on a decline since 2019. These figures coincide with the decline in total national herding in 2019 due to recurring and devastating droughts (see figure 6, appendix). Since most dairy farmers are in the Hardap region and rely heavily on the Hardap Dam levels, their production is affected when dam levels are low. According to the World Data Atlas, Namibia produced 111,199 thousand tonnes of milk in 2022. Overall, milk production in Namibia has marginally increased from 60,000 thousand tonnes in 1973 to 111,199 thousand tonnes in 2022, growing at an average annual rate of 1.47 percent[14].

b) Processing

27. The diary industry's impact is substantial. The sub-sector comprises milk-producing cattle farmers who supply their product to Namibia Dairies, the primary distributor of fresh and long-life milk, and value-added dairy items in Namibia. In this respect, Namibia Dairies offers diverse products, including long-life milk, soft cheese, yoghurts (derived from dairy), traditional fermented dairy products, fruit juices, dairy blends, and carbonated and still mineral water.

c) Marketing

28. The dairy industry has an opportunity to penetrate markets of neighbouring African countries. The dairy industry has an opportunity to penetrate countries such as Angola especially since there is a high demand for cultured milk products (Omaere, Oshikandela and Oshitaka). However, the issue of uncertainty when it comes to payments from Angola poses a serious business risk for producers considering the need for cashflow.

[12] https://ntf.org.na/wp-content/uploads/Resource%20Center/General/MITSMED%20Poultry%20Importers%20Scheme%20Criteria_06.03.2020%20...pdf

[13] Namib Poultry through interviews conducted

[14] https://knoema.com/atlas/Namibia/topics/Agriculture/Live-Stock-Production-Production-Quantity/Production-of-milk

d) Key challenges and constraints

29. The influx of cheaper dairy imports poses a significant risk to the Namibia dairy industry. Since 2004, the Namibian dairy industry has been on the verge of extinction due to the influx of cheaper dairy imports from South Africa. The cheaper products, despite larger economies of scale and cheaper inputs in South Africa, is also because milk products are zero rated in that country. An eight-year Infant Industry Protection (IIP) initiative was implemented to shield the industry, which expired in 2008. Despite the protective measures, the sector struggled to meet domestic demand even during the IIP period.

30. More broadly, the Namibian dairy industry grapples with various challenges that have led to low milk production[15]. Only a mere three (3) farmers are supplying milk to Namibia Dairies as of three years ago, marking a significant decline from more than twenty (20) farmers a few years ago[16]. There are, in total, less than ten (10) milk farmers in the country. These formidable obstacles include cheap imported dairy goods, unfavourable exchange rates, escalated feed expenses for cattle, and recurring droughts impacting dam water levels—particularly evident at the Hardap Dam. As such, the country remains a net importer of dairy products from South Africa, Zimbabwe, Sweden, Denmark, and Portugal, with the importation of UHT and extended shelf-life milk witnessing substantial growth over the years[17].

2.2 Crops value chain

2.2.1 Sorghum

31. This section covers all stages of the sorghum value chain, the status quo of sorghum production, and marketing in Namibia.

32. A study by NAB (2023) concluded that Namibia's current sorghum value chain highlights the gaps in relationships between chain actors compared to the ideal scenario. The existing chain lacks traders' assemblers, wholesale traders, processing components, and local distributors. Development and linkage among components such as village input production, trade, assembling, wholesale, processing, retail, and consumption are essential to establish a functional sorghum value chain in Namibia. Connecting these components with smallholder farmers, markets, vendors, and consumers is crucial for improvement.

33. Seeds and inputs: Planting high-yielding certified seed varieties from accredited sources is crucial to sorghum production in Namibia. However, most producers still rely on traditional local varieties and reserve seeds from previous harvests, leading to a shortage of certified seeds during planting (NAB,2023). To address this issue, it is essential to implement awareness programs on Namibia's Seed and Seed Varieties Act, as these programs can effectively educate producers and encourage the use of certified seeds

34. Production and storage: Sorghum production in Namibia is primarily for household use due to the absence of a well-established market and marketing mechanisms. Local producers predominantly plant red and macia sorghum varieties at an average seeding rate of 9.6kg/ha. However, as noted by NAB (2023), poor record-keeping practices significantly impact the calculation of production costs. Traditional on-farm storage methods for sorghum grains in Namibia may also affect grain quality and storage duration. To mitigate these issues, improved granaries are recommended for reducing insect attacks and losses during storage, as suggested by Nyambo (1993).

35. Traders/processors and Marketing: According to NAB (2023) traders and processors are eager to source local sorghum products and support organised farming among producers to ensure a consistent and quality supply. Around 83 percent of sorghum traders are affiliated with industry organizations. They are willing to enter supply agreements with local producers. Despite producers' willingness to market sorghum in bulk, the lack of a formal market leads them to sell informally for household use. Value-added products are more profitable than raw sorghum, leading to high imports and limiting local participation in the formal economy.

[15] https://hei.com.na/wp-content/uploads/2023/10/Namibia-Dairy-Industry-updated-draft-MK-TU-002-003-003-002-002.pdf

[16] https://hei.com.na/wp-content/uploads/2023/10/Namibia-Dairy-Industry-updated-draft-MK-TU-002-003-003-002-002.pdf

[17] https://hei.com.na/wp-content/uploads/2023/10/Namibia-Dairy-Industry-updated-draft-MK-TU-002-003-003-002-002.pdf and interviews conducted by authors.

2.2.2 White maize

a) Production

36. White maize is exclusively produced in Namibia for human consumption and is one of Namibia's staple grains and, a controlled product. White maize is planted under both rainfed conditions and irrigation. The irrigation areas are the Hardap Irrigation Project and environs, the government projects along the Kavango River and in the Omusati Region as well as a number of farms in the eastern production area and the Maize Triangle. The dry-land production areas are mainly in the Maize Triangle, the Zambezi Region, the Maize Triangle and the eastern production area in the Summerdown environs[18]. Local production of white maize averaged to 61,403 tonnes between 2010 and 2023, while imports of white maize averaged 106,447 tonnes over the same period (see table 7, appendix).

b) Processing

37. White Maize is used in the country's milling process of porridge and instant porridge. Porridge and instant porridge use maize meal as their main ingredient. However, current milling companies in the country mainly use white maize imported from South Africa, due to low local production capacities. Other ingredients are also added in smaller quantities. While salt is sourced locally, sugar, flavourings and vitamins are all imported from South Africa as inputs.

2.2.3 Wheat

a) Production

38. Wheat is mainly produced in commercial areas under irrigation. Wheat production occurs under irrigation in the commercial areas and government projects situated in the communal areas and marketed to millers or sold to the Agro-Marketing and Trade Agency (AMTA). Local production of wheat averaged 12,342 tonnes from 2010 to 2023, while imports averaged 108,798 tonnes during the same period (see figure 8, appendix). The low production numbers are mainly due to wheat being a winter crop that requires very cold conditions, however, because of Namibia's winter being very short, the crop cannot be produced optimally and is mostly grown in the southern part of Namibia that receives colder conditions.

b) Processing

39. Wheat is typically milled into flour which is then used to make a wide range of foods including bread, noodles and pasta. The complex method of pasta manufacturing adds value to the wheat, making it a suitable candidate for exports. Figure 7(in the appendix) shows the performance of wheat with respect to local production, imports and local consumption over the period 2010 to 2023. In this context, statistics confirm that there is growing demand for pasta in the Southern African market. However, the grain marketing mechanism that was established to promote local grain production by the Namibia Agronomic Board (NAB) appears to have impacted products that use wheat as a raw material. Currently, importers of grains are expected first to source locally produced grains and are charged a 5 percent NAB levy on imported grains. Unfortunately, producers are forced to absorb this cost as there is insufficient wheat available locally to meet their demand.

[18] https://www.nab.com.na/agronomy/white-maize/

2.3 Fruits value chain

2.3.1 Table Grapes

40. Aussenkehr in southern Namibia is renowned for producing high-quality table grapes, known for their sweetness and crisp texture. The region's mild climate and abundant sunshine create ideal conditions for cultivating grapes. The industry is the largest employer in the underdeveloped Karas region, where Aussenkehr is situated. Another grape production area is found 600 kilometers north of the Orange River at the Hardap irrigation scheme in Namibia's South-Central region.

a) Production

41. Table grapes represent a significant agricultural commodity in Namibia, playing a pivotal role in the country's agricultural landscape, economic output, and foreign currency earnings. According to Capespan, approximately 2,270 hectares of land in Namibia are dedicated to table grape cultivation, with involvement from 11 distinct companies. Notably, the Namibian Grape Company (NGC) emerges as the largest table grape producer in Namibia, boasting 475 hectares under active production and an additional 100 hectares earmarked for vineyard development. NGC's existing output stands at approximately 7,650 tons.

42. Namibia's grape production grew more than 50 percent faster than the world's largest grape producers. Food and Agriculture Organization (FAO) data shows that Namibia has had the highest growth in grape production in the world over the past three decades. As illustrated below, between 1995 and 2022.

Table 1: Grape production

Country	1995	2022	Relative Change
Brazil	836,545.00 t	1,450,805.00 t	+73%
China	1,741,700.00 t	12,600,000.00 t	+623%
India	700,000.00 t	3,401,000.00 t	+386%
Namibia	2,298.00 t	37,927.67 t	+1550%
Russia	300,560.00 t	889,500.30 t	+196%
United States	5,372,600.00 t	5,372,800.00 t	+0%

Source: FAOSTAT

b) Processing

43. Once maturity is reached, the grapes are harvested, placed in crates, and moved to cooling and packhouse facilities. Pre-cooling immediately after harvesting reduces the risk of disease and product deterioration. The fruit is sorted into grades for the export market, packed (usually in cartons) according to buyer requirements and placed on pallets. There is little to no downstream processing of the grapes because of the types of grapes Namibia produces, apart from raisin production from the low-quality grapes.

c) Marketing

44. Walvis Bay is seen as a viable export hub, with potential for increased cargo from Namibian and South African growers. Shipping through Walvis Bay saves around four days of shipping compared to Cape Town, ensuring fresher fruit for customers. However, there are challenges, like the 508 km longer round trip for trucks from Aussenkehr to Walvis Bay compared to Cape Town. The distance from Aussenkehr to Walvis Bay is 911km while that from Aussenkehr to Cape Town is 734km. Nonetheless, it's predicted that the competitive logistical solution provided by Walvis Bay will surely attract more cargo from Capespan and others in the future. However, for a competitive advantage, this will require the construction of a shorter route through Maltahohe that will save approximately 300km of travel distance.

d) Key challenges and constraints

45. More land would be required to increase production further to meet global demand. Namibia's current production of grapes and dates would need to be significantly increased to meet potential demand from other markets such as the USA.

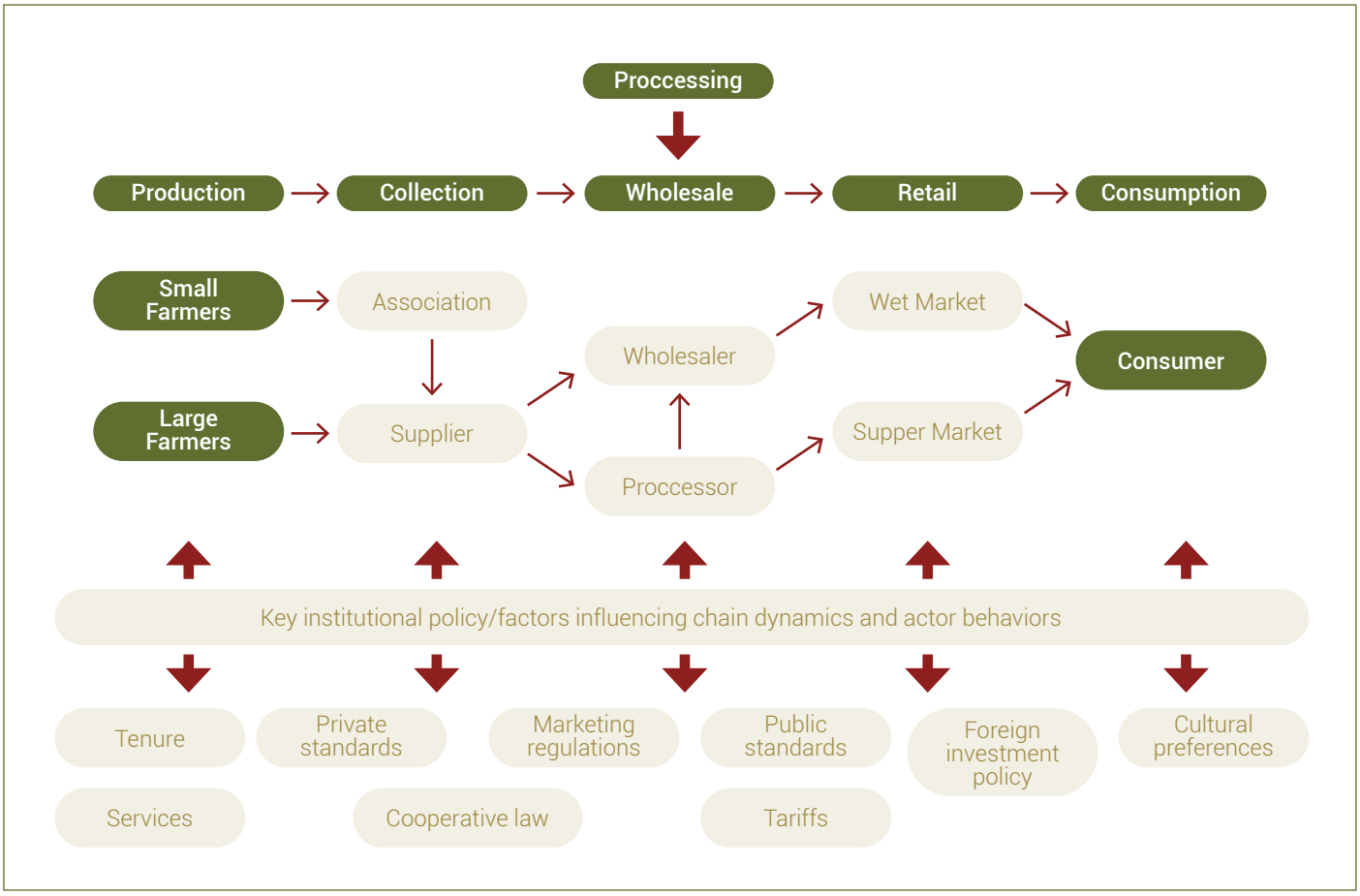
46. Namibian grape-growers are currently grappling with escalating input expenses, notably in relation to fertilizers. Moreover, the transportation of goods over extensive distances across the Atlantic necessitates a robust cold-chain infrastructure and incurs substantial costs. It is imperative to explore economical shipping solutions and establish strategic partnerships, particularly considering the new container terminal at the Walvis Bay port. While the option of airfreighting grapes exists, it is expensive and contingent upon a guaranteed market.

III. Agricultural Global Value Chains

3.1 Agricultural Global Value Chains

47. Agricultural value chains encompass the various stages of bringing an agricultural product from production to the final consumer. A value chain is a set of linked activities that work to add value to a product; it consists of actors and actions that improve a product at every stage, while linking commodity producers to processors and markets[19]. The core, or primary factors in agricultural value chains typically include, farmers, input suppliers, wholesalers, agents and traders, manufacturers, and retailers[20].

Table 1: Grape production



Source: ResearchGate[21]

48. About one-third of trade in food and agriculture occurs within global value chains (GVC). Coffee, palm oil or biofuels production are examples of the modern organization of agri-food production through GVC (de Becker, Miroudot, 2014; Greenville et al., 2016; Balié et al., 2019). Agricultural raw materials nowadays may cross borders many times before reaching the final consumers, as they are embedded in intermediate and processed goods which are produced in different countries[22]. Agri-food GVC are typically characterized by a strong coordination between farmers, food processors or traders, and between processors and retailers.

49. The growth of the agri-food GVC raises new issues for the agricultural and food sectors. Participating in the GVC is expected to have several positive effects, for both countries and farmers. These include technology and knowledge spillovers, increased productivity, growth, employment opportunities, and ultimately higher income for farmers. On the other hand, the high concentration of the agri-food global value chain raises concerns about the emergence of market power (Swinnen, Vandeplas, 2014). There are concerns that participating in agri-food GVCs may lead to the intensification of agricultural production, resulting in negative environmental effects due to the depletion of natural resources and water stress.

[19] https://www.devex.com/news/agricultural-value-chains-a-game-changer-for-small-holders-83981

[20] https://afrikelp.com/the-farmers-role-in-the-food-value-chain/#:~:text=The%20core%2C%20or%20primary%20factors,land%20or%20other%20natural%20resources.

[21] https://www.researchgate.net/publication/341008981_Analysis_of_cassava_value_chain_in_Ghana_implications_for_upgrading_smallholder_supply_systems

[22] https://oaj.fupress.net/index.php/bae/article/view/13517

50. Many developing countries have increasingly participated in international trade over the past decades[22]. Some emerging economies, particularly in Asia, have become more important players, both as exporters and as importers. This has further resulted in rapid divergence between countries[23]. The extent to which countries are integrated in global production networks is worth examining. Similarly, establishing the level of production that developing countries are involved in and the type of final products they trade as intermediates is important. Generally, it is expected that the degree of integration varies between sectors and between countries.

3.2 Namibia trading arrangements

51. As a small economy with a limited domestic market, Namibia has an array of trading arrangements underpinned by a commitment to trade openness and integration into regional and global markets. The country is a member of the African Continental Free Trade Area (AfCFTA), the Southern African Customs Union (SACU), the Southern African Development Community (SADC), as well as the African Growth and Opportunity Act (AGOA), amongst others. The key objectives of the trade agreements as well as the impacts they have on the agricultural sector is summarised below.

Trade agreement	Key objectives	Agricultural impact
African Continental Free Trade Area (AfCFTA)	Seeks to remove tariffs on 90 percent of goods, allowing for free access to commodities, goods and services across the African continent	AfCFTA provides opportunities for Namibia to diversify its economy by developing and expanding value chains. This can lead to economic transformation and reduce reliance on a few key sectors. In addition, by joining AfCFTA Namibia gains access to a market of 1.3 billion people across 55 African countries. This can boost exports and the country's led-led manufacturing and services capabilities.
Southern African Customs Union (SACU)	The SACU treaty is a customs union agreement between Namibia, Botswana, Lesotho, Eswatini, and South Africa, allowing for free trade in goods and a shared external tariff. Free trade means no tariffs or limits on imports and exports. The SACU 2002 Agreement uses rebates to encourage local manufacturing by waiving customs duties on imported goods used in production.	Namibia uses SACU rebate facilities for trade initiatives, especially in agriculture. The Ministry of Agriculture administers agricultural rebates, focusing on food imports like butter, cheese, and milk powder. The goal is to support local production and economic growth.

[23] The global perspective AGVCs will be will be covered in paper 2 of symposium paper.

[24] https://www.wto.org/english/tratop_e/devel_e/w15.htm

[25] The Namibian Government, in collaboration with the Economic Commission for Africa (ECA) and the United Nations System in Namibia, officially launched Namibia's National Strategy and Implementation Plan for the Agreement Establishing the African Continental Free Trade Area (AfCFTA) for the period 2022-2027

Southern African Development Community (SADC)	The SADC Protocol on Trade (1996), as amended in 2010, aims to reduce customs duties and other trade barriers among member states. It has led to the creation of a Free Trade Area (FTA) within the region significantly boosting intra-regional trade. Namibia's main trading partners with the SADC include South Africa, Botswana, Zambia and Zimbabwe.	These partnerships are crucial for Namibia's economy, facilitating the exchange of goods and services and contributing to regional economic integration.
African Growth and Opportunity Act (AGOA)	Namibia is one of the 32 sub-Saharan African countries benefiting from preferential access to the U.S. market through the AGOA trade agreement. This agreement allows for duty-free and quota-free access to around 6,700 products.	AGOA expands on the U.S. Generalized System of Preferences, providing more extensive coverage for products like apparel, footwear, wine, motor vehicle components, agricultural products, chemicals, and steel. Eligible products under AGOA include textiles, clothing, motor vehicles, agricultural goods, nuts, leather products, chemicals, wine, luggage, machinery, and more. These trade preferences are in place until 2025, offering a significant opportunity for Namibia and other SSA countries.

52. There remains opportunity to increase access to markets by introducing new varieties of food products that the country currently produces. The country mainly produces fruits and vegetables for primary consumption. If these producers could venture into different varieties of the same products by diversifying seeds, there could be another market for these products. For instance, Namibia produces table grapes, if these producers could venture into raisins or grapes needed as input for wine. However, this would require a different variety of seeds, and further studies would need to be done on the viability of the wine grapes in the Namibian climate and water conditions.

3.3 Namibia's export trade in agricultural products

53. Namibia's trade is characterized by a relatively high degree of dependence on imports for consumer goods and exports of raw materials, particularly minerals and agricultural products. As illustrated in Table 2, Namibia's global goods trade balance has remained in deficit over the past six years, underpinned by fast-rising import costs that more than offset increasing export receipts. In 2023, exports totalled US$5.5 billion, an 8.6 percent decrease from 2022's $6.0 billion. Imports, on the other hand, amounted to US$7.2 billion in 2023, a 9.0 percent decrease from 2023's US$8.0 billion. The trade imbalance underscores the need for strategic interventions to promote value addition, diversify the economy, improve export competitiveness, and enhance trade facilitation measures to address the deficit effectively.

Table 2: Namibia global trade in U$, 2018-2023

	2018	2019	2020	2021	2022	2023
Exports Of which Agricultural exports	**7,488**	**6,439**	**5,424**	**4,461**	**6,005**	**5,488**
	1,098	1,029	815	1,019	1,079	970
Imports Of which agricultural imports	**8,289**	**7,715**	**6,613**	**6,446**	**7,958**	**7,239**
	878	987	834	1,073	1,030	
Trade balance	-800.6	-1275.9	-1188.6	-1985.3	-1953.0	-1751.1

Source: FAOSTAT

54 .Agriculture trade, both import and export, is essential for economic development for Namibia. Import trade helps address impediments Namibia faces in agriculture due to climate change and other geographic conditions. Export trade on the other hand, helps Namibian agricultural producers gain better returns in export market scope to create necessary economies of scale[26].

55. Namibia's top exports of agricultural products are grapes, animals, pasta, onions, tomatoes and dates. Table 3 below shows that Namibia's top exports are grapes, followed by live animals (mostly cattle, sheep and goats), pasta, fresh and frozen meat, onions, tomatoes, dates, figs and pineapples. Major agricultural export markets are South Africa, Botswana, the European Union and the Middle East. Namibia became the first African country to export beef to China due to an agreement concluded in 2016, and the only African country to export to the United States in 2020 (although this has since halted).

Table 3: Top 10 export products and export partners, 2023

Exported product	Value (US$) _2023	Export partners
Grapes	72,875,671.29	Netherlands, United Kingdom, Germany, South Africa, Spain, Belgium, Ireland
Live bovine animals	58,575,808.45	Netherlands, United Kingdom, Germany, South Africa, Botswana
Live sheep and goats	48,553,677.10	Germany, Netherlands, United Kingdom, South Africa, Spain
Meat of bovine animals, frozen	31,899,265.51	Netherlands, South Africa, China, Malta, Ireland
Pasta	27,333,512.34	South Africa, Italy, Zambia, Zimbabwe, Norway
Meat of bovine animals, fresh	24,280,527.20	Zimbabwe, Netherlands Antilles, Norway, Uganda, Netherlands
Onions, shallots, garlic, leeks…	9,912,962.87	Netherlands, United Kingdom, Ireland, Portugal, Kenya
Tomatoes	9,066,758.13	United Kingdom, Malaysia, Nigeria, Austria
Dates, figs, pineapples etc	7,815,683.87	Netherlands Antilles, Maldives, South Africa, Tanzania, Malaysia
Meat of sheep or goats,	5,082,979.02	Malaysia, Maldives, United Arab Emirates, Norway, Netherlands Antilles

3.3.1 Namibia beef export[27]

56. Namibia is a significant player in the global beef export market, but remains a very small supplier compared to Canada, Mexico, and Australia. Namibia benefits from being free of major livestock diseases, such as foot-and-mouth disease, bolstering the marketability of its beef to international buyers. Additionally, Namibian beef commands higher prices due to its specific qualities (renowned for its grass-fed, free-range beef, characterized by distinct flavour and tenderness), aligning it with exporters like New Zealand and Argentina focusing on premium, niche markets.

57. Figure 9 (in the appendix) shows that Namibia's beef exports have significantly decreased over the past decade. This is mainly due to a sharp decline in exports to the South African market. The decline has been attributed to the quality standards imposed on Namibian beef and the loss of market share to domestic producers in South Africa. Nevertheless, Namibia's beef exports increased from $27 million in 2021 to $54 million in 2023. The EU and South Africa are the dominant destinations for Namibian beef, with Europe accounting for a significant share of total exports. The Netherlands and Norway together accounted for 62 percent of Namibia's beef export market share in 2022.

South Africa is an important market in Africa, highlighting the significance of regional trade relations. Namibia has, however, successfully diversified its export destinations and tapped into growing economies, with China emerging as a key market. In fact, Namibia made history in 2016 by becoming the first African country to export A-grade beef to China, following a milestone agreement.

58. Although Namibian beef has a reputation for excellent quality and regulatory compliance, it has not yet reached its full potential to become a globally preferred meat product. In recent years, Namibia has worked to diversify its export markets and has made progress in developing new markets in Asia and the Middle East. The Namibian Government has set an ambitious target of increasing beef exports to 30,000 tons per year by 2030 from 9,758 tons of fresh/chilled and frozen beef exported in 2022. This will require a significant increase in production but is achievable if the industry continues to invest in its growth.

[27] Namibia Market assessment study (2024).

59. The export of live animals to South Africa still dominates the export market despite industrialization efforts. Cattle exported live to South Africa dominate the export market by almost double those slaughtered for exports. On average between 2006 – 2023, 190,095 live animals were exported yearly, of which more than 90 percent were exported to South Africa, compared to an average of 109,813 between the same period. However, this as contrary to the principles and aims of industrialisation, as no local processing is done, thereby resulting in lost opportunities to add value in Namibia and decreasing utilisation of capacity, especially as there would be no exports of high-quality cut beef to the international market. This is despite the export incentives put in place by the Livestock and Livestock Products Board of Namibia. This will however continue being the trend for as long as there are limited feedlots in the country, as high-quality meat requires well-fed animals.

3.3.2 Grapes and date export

60. In recent years, table grapes have become Namibia's export success story. Table grapes and dates represent around 1.4 percent of the country's total exports, while grapes were the second most-important agricultural product in terms of foreign exchange earned, accounting for 14.4 percent of agricultural exports. Grape exports have grown over the past decade (2013 to 2023), realizing $466.9 million in aggregate sales.

61. Namibia offers counter-seasonality to Northern Hemisphere producers, supplying fresh grapes during their off-season, particularly from November to December, when they are in high demand. Over this period, they command premium prices due to their availability ahead of Southern Hemisphere competition. In 2023, almost 50 percent of all Namibian table grape sales went to the EU (Netherlands and Germany), 29 percent to the UK, and just below four percent to South Africa. Although initially focused on Europe and the UK, Namibia's grape exports have reached a wide range of international markets. Within Africa, Namibia is the third largest exporter of grapes by value, accounting for 1.1 percent of the continent's total grape exports in 2023. South Africa and Egypt are the dominant African producers for international markets (ITC Trademap 2022, FAOSTAT 2023).

62. In 2023, Namibia exported 63,521 tonnes of table grapes, which is a significant increase compared to previous years. Namibia exports of table grapes more than doubled from 2010 to 2023, from exports of 20,429 tonnes of grapes in 2010 to 63,521 tonnes exported in 2023 (NAB, 2024). This represents an export value of approximately $74.1 million (ITC Trademap), or 0.6 percent of global table grape exports. Although this share is not insignificant given the size of the Namibian industry, there is potential to gain a larger share of the global market.

63. In contrast to table grapes, aggregate export sales of dates over the past decade (2013-2023) were much lower at $37.1 million. Although Namibian dates contribute much less to the value of export sales (just over 1 percent of agricultural exports in 2023), the trend in export growth over the last ten years is positive. In 2023, Namibian dates earned $7.8 million in export revenues, making them a leading horticultural export earner. South Africa is the largest importer of Namibian dates, accounting for approximately 50 percent of export sales. The United Arab Emirates and the UK follow, with 25 percent and 17 percent, respectively. Namibia is a relatively small exporter of dates within Africa, contributing only about 1.2 percent of the continent's total date exports in 2023. Namibia faces stiff competition from Tunisia, Algeria, and Egypt in the international markets (ITC Trademap).

Box article 1: Opportunities offered by the Neckartal Dam

The Neckartal Dam is located in the //Karas Region of southern Namibia, approximately 40km west of Keetmanshoop. Construction of the Neckartal Dam started in 2013 and was inaugurated in March 2020. The dam stands approximately 80 metres in height, measuring 518 metres at crest length, with a volume of approximately 900,000 cubic metres. Neckartal Dam is the eighth largest dam in Southern Africa by storage volume. Its construction and subsequent associated irrigation schemes are a very important development project for the Namibian government, aimed at stimulating economic growth in the Southern Region of Namibia. This body of water could also be an adequate resource for expanding more irrigation schemes in southern Namibia, as well as benefit other projects such as[28]:

i) Irrigation green schemes: consisting of various crops such as cash and high value crops, lucerne and fodder, depending in the outcomes of the feasibility studies and soil tests.

ii) **Hydroponic** green feed and fodder as well as small stock feedlots.

iii) **Fishing:** recent assessments from the Ministry of Fisheries and Marine Resources proved that the Neckartal dam is home to various fish species.

[28] Excerpt from a paper produced by Bank of Namibia in 2022: The Neckartal and Naute Dam projects.

IV. Agricultural policy framework in Namibia

64. The agricultural industry is governed by the Agricultural Policy of 1995, reviewed in 2015, which has clear objectives on agricultural production, agro industry development, marketing and trade as well as research and development. The Ministry of Agriculture, Water, and Land Reform (MAWLR) is responsible for the formulation and implementation of agricultural policy. The Ministry oversees three regulatory agricultural agencies, namely the Namibia Agronomic Board (NAB), the Livestock and Livestock Products Board (LLPB), and the Karakul Board of Namibia[29]. The Agro-Marketing and Trade Agency (AMTA) is an SOEs under the supervision of the Ministry Agriculture, Water and Forestry, responsible for the management of Fresh Produce Business Hubs and National Strategic Food Reserve facilities, to ensure high quality standards in achieving food security.

65. The Harambee Comprehensively Coordinated and Integrated Agricultural Development Programme (HACCIADEP) of 2017 is another key strategic document that emphasises the development of agricultural value chains. Designed in line with MAWF's HACCIADEP, the Namibia Agricultural Mechanisation and Seed Improvement Project's (NAMSIP) is a stand-alone investment Project aimed at improving cereal-crops/grains and livestock value chains.

The HACCIADEP aims at stimulating high quality production and market access for crops and livestock products especially from small and medium scale farmers and agro-processors.

NAMSIP will contribute to the attainment of HACCIADEP's 2 schemes, namely (i) agricultural mechanization scheme, and (ii) seed systems development scheme, which are key for sustainable crop and livestock value chain improvement. The Ministry is currently in the process of developing a Namibia National Agriculture Investment Plan and reviewing the outdated National Drought Policy and Strategy (1997).

66. The Ministry also administers Namibia's Green Scheme Policy (2008), which targets about 22,000 ha for irrigation development along the perennial rivers in the Northern and Southern parts of the country (Kunene, Kavango, Zambezi, and Orange River). However, these government projects have been in financial difficulties and only about 9,000 ha under irrigation were accomplished by FY2021/22. The services provided to farmers include, centre pivot irrigation systems, tillage services, and training, amongst others.

67. The growth of Namibia's agricultural industry is primarily driven by the Market Share Promotion (MSP) scheme and the Grain Marketing Mechanism. The schemes aim to support various agrarian products and protect infant industries, given the country's low population and high input costs. Competition is largely skewed at present, with agricultural produce imports from larger economies like South Africa being relatively cheaper due to lower input costs. To this end, the agricultural regulators such as NAB and the LLPB implemented the Market Share Promotion scheme, a growth-at-home strategy to stimulate agricultural production in Namibia. Through the scheme, Namibia (through the NAB) has been implementing two key schemes to promote import substitution of grains and horticultural products and thereby meet food security objectives. The Namibian Horticulture Market Share Promotion Scheme and the Grain Marketing Mechanism combine local purchase requirements with restrictions on imports and promote sales of locally produced fresh fruit, vegetables and grains. This is mainly done by encouraging importers such as wholesalers, catering companies and retailers to source locally. The LLPB manages a similar scheme for pork.

V. Challenges within the agricultural value chains

68. Climate change is a major concern for Namibia as the increasing frequency of droughts continues to hamper commercial production, especially for rain-fed agriculture. Rain-fed commercial production of agricultural products face serious threats as this may no longer be viable due to the changes in climatic conditions. The country relies heavily on rain for grain production. As such, during years of prolonged dry spells, the country tends to depend heavily on imports to offset the limited local production. This is evident in the current year (2024), where, according to the NAB, the country spent over N$1 billion on maize imports to augment a maize shortfall caused by the drought[30].

69. The cost of manufacturing in Namibia is higher compared to neighbouring countries due to the high input cost of water and electricity. The agro-processing industry continues to express discontent about high water and electricity costs. By their nature, abattoirs use a lot of water and electricity and, therefore, have higher tariffs than most businesses. In addition to this, abattoirs are charged an extra levy on dirty water. The associated exorbitant energy and water costs are two key challenges for reaching full production capacities and profitability. Additionally, companies such as millers are charged a demand charge of approximately N$150 000 for simply switching on the water pumps, which is an additional cost to the actual electricity consumption.

70. Electricity and water costs in Namibia are higher than its regional counterparts. According to a regional comparison done by Ombu Capital (2022), Windhoek's water tariffs for businesses are higher than those in Johannesburg and Lusaka. They also compared Windhoek's tariffs to those of Berlin and found that Windhoek was significantly higher. Similarly, they compared the same towns to Windhoek's electricity tariffs and found that Windhoek's tariffs are still higher than Johannesburg and Lusaka, and only cheaper than Berlin.

[29] https://www.npc.gov.na/wp-content/uploads/2022/06/Namibia-Agriculture-Policy-2015.pdf

[30] https://thebrief.com.na/2024/06/namibia-faces-billion-dollar-maize-import-bill-due-to-drought/

71. The private sector has tried to find ways to lower their water and electricity bills by recycling water and using renewable energy sources. To mitigate this and find alternative solutions, the private sector has started to address electricity and water issues by implementing renewable sources and recycling water used in the manufacturing process via reverse osmosis. Despite this, battery prices remain high, and the energy generated cannot be stored and can only be used during the day and at night or during cloudy days, revert to the grid. The Government should thus consider lowering the price of electricity to meet the private sector halfway.

72. Along the agro-processing supply chain, other challenges exist, including poor-quality storage facilities, high transportation costs, lack of skills and information asymmetries. According to the NAB (2022), Namibia has import substitution opportunities for non-sophisticated products such as fruit juice, fruit pulp, frozen vegetables, frozen potato chips, pumpkin (jam and purees), chilled vegetables (cut and dice, spices), tomato paste, tomato sauce, virgin olive oil, spices, and other dried vegetables. However, a study that the NAB conducted on the potential of processing fruits and vegetables revealed bottlenecks associated with high prices (costs of transport, storage, certification, labour, and importing packaging materials), lack of skills, lack of information, lack of infrastructures and machinery, poor planning, absence of supply chain coordination, diseconomies of scale and inconsistency, thus resulting in low competitiveness[31].

73. Other challenges within the agriculture value chain include the unavailability of inputs such as seeds and fertilizers within the local market. There is a lack of agricultural inputs (i.e. seeds, fertilisers, etc.) within the local market, with a significant portion of inputs mainly imported. According to data obtained from the NSA, Namibia imported an average of N$12,795,516.00 seeds between 2010 and 2023. It imported N$776,776,302.00 and N$606,122,999.00 worth of feed and fertilizers, respectively in the same period (see figure 12 in appendix). Overall, fertilizer prices saw huge increases from 2020 to 2022 due to the Covid-19 pandemic and later the disruptions as a result of the Russia-Ukraine conflict. This is so because, during the pandemic, transport and logistics regulations and disruptions had a negative effect which resulted in the high surge in fertiliser prices as seen in 2022. A sharp increase in prices of fertilizer is seen in 2023 (see figure 12 in appendix) because of global production shortfalls for urea and ammonia[32].

74. Despite these challenges, the NAB discovered that a lack of agro-processing opportunities may also contribute to the low production of primary products. This is because agro-processing requires large amounts of primary products for processing. A recent study commissioned by the NAB revealed about 24 agro-processors of horticultural commodities in Namibia. However, most of these processors use imported primary products, mainly from South Africa (NAB, 2023). This implies that this industry will not grow until there is sufficient supply of primary products in the Namibian market.

75. The delays in implementation of regulations and bills makes attracting investors into the country difficult. The absence of regulatory frameworks and lengthy approval process for pending bills hinder Namibia's investor attraction. Approximately 70 bills are awaiting approval, causing uncertainty for businesses. Some of the outstanding bills that have been seen as unfriendly for investment, include the Investment Promotion and Facilitation Bill, National Equitable Economic Empowerment Bill, and International Trade Management Bill. Additionally, critical regulations encompass the Special Economic Zones Bill, the Consumer Protection Bill, the Food Safety Bill, and legislation about land and procurement. Timely cancelation of unpassed draft bills is crucial for investment and economic growth. Revoking former tax incentives for local manufacturing without suitable alternatives has negatively affected investment decisions and the economy.

76. Although the Namibian immigration laws allow for the importation of skilled workers, some industries require semi-skilled workers. Specific industries may, however, require semi-skilled workers. Although the law permits skilled workers to enter the country, it is very stringent regarding semi-skilled workers, such as farm-heads. Industry has complained about workers being reluctant to uproot their lives for a two-year work visa, while Namibian workers resign after receiving the training. It might be prudent for the Government of Namibia to introduce less stringent work visa applications for certain industries.

Seeds imported between (2010 - 2023)
worth **N$12,795,516.00**

Feed imported between (2010 - 2023)
worth **N$776,776,302.00**

Fertilizers imported between (2010 - 2023)
worth **N$606,122,999.00**

[31] https://www.nab.com.na/wp-content/uploads/2023/03/Research-article-THE-POTENTIAL-OF-PROCESSING-FRUITS-AND-VEGETABLES-IN-NAMIBIA.pdf

[32] https://thedocs.worldbank.org/en/doc/40ebbf38f5a6b68bfc11e5273e1405d4-0090012022/related/Food-Security-Update-XCV-11-9-23.pdf

Box article 2:
Agriculture Financing in Namibia

Agriculture financing plays a critical role in the success of this sector. The following are benefits of agricultural financing:

- Increasing production and growing income of farms and agricultural SMEs through access to better technologies and commercialization.
- Increasing financial inclusion in rural areas and the agricultural sector; increasing access to finance through formal financial institutions.
- Increasing resilience (risk management capacity) through climate smart production, risk diversification and access to financial tools (e.g. savings, insurance, contingent credit etc.)

Namibia has an agricultural bank, the Agricultural Bank of Namibia (known as AgriBank of Namibia), that offers various options for agriculture and farming in Namibia. AgriBank Namibia, in addition to finance agricultural land, has an array of credit facilities that cater to climate financing, production loans in cases of droughts, infrastructure loans for feedlots, as well infrastructure loans for boreholes and even solar.

The Development Bank of Namibia (DBN) also offers various agricultural and agro-processing products to Namibian businesses. According to DBN, it views agricultural enterprises as a critical economic component that is vital to food security, exports of foodstuffs and ongoing economic activities in Namibia associated with agriculture. Although DBN does not finance the purchase of land, it does provide funding for inputs critical to operation of enterprises that process agricultural produce. These enterprises include millers, abattoirs, dairy farms, agricultural infrastructure (dams, irrigation, crop tunnels, hydroponics, feed lots, washing, sorting, grading, packing & freezing facilities, etc.), aquaculture, animal feed processing, fertiliser production, food manufacturing and logistics assets (cranes, containers, warehouses, refrigeration, etc.)

These are not the only institutions that offer agricultural financing in the country, the commercial banks in Namibia also play a critical role in extending credit to customers.

VI. Conclusion and policy recommendations

6.1 Conclusion

77. Namibia's agricultural sector has grown significantly in the last few years, introducing new products and increasing export destinations. The agricultural sector remains crucial to Namibia's economy, contributing significantly to employment and GDP. Namibia has diversified its agricultural output, with notable growth in producing fruits and nuts. These products have found new markets in Europe and the SADC region, although there are currently no exports of raw agronomic products such as wheat or maize, due to limited production in the country. Being a small country with low economies of scale, Namibia still has a long way to go in terms of expanding participation within the AGVC.

78. A key challenge within the livestock sub-sector remains recurring drought and erratic rainfall, which have severe implications for the agricultural sector. Severe drought conditions constrain agricultural output and lead to a sharp decline in harvests and compromises productivity of the livestock sector. This makes over-reliance on livestock production and lack of diversification more challenging and puts even more pressure on both livestock and crop farming.

79. The cost of producing agricultural products is defined by higher input prices in Namibia, regardless of production enterprise. The country faces serious bottlenecks in producing sufficient products due to high input costs such as water and electricity, feed, fertilizer, and seeds, which are mainly sourced from outside the country.

6.2 Policy recommendations

General recommendations

81. The Government must have a clear vision and mandate to improve coordination among government players and ensure the involvement of the private sector. Transforming tropical commodity production in landscapes and supply chains will ensure future productivity and security, improve livelihoods and protect crucial ecosystems and natural resources.

82. Enabling policies in agriculture is crucial for improving the business environment, strengthening public institutions, freeing up regional trade, and increasing public investment in rural infrastructure. Transport infrastructure, education levels, and agricultural research and development are positively related to participation and domestic value-added creation resulting from GVC participation.

Specific recommendations

i. Cross cutting recommendations

a) Improving the ease of doing business

83. The government needs to find a solution to the issue of high electricity costs. The high demand fees levied against greens schemes need to be examined. Similarly, despite the low prices of solar PVs, battery prices in Namibia remain high, and the energy generated cannot be stored and can only be used during the day, and at night or during cloudy days, subsequently reverting to the grid. The government should thus consider lowering the price of electricity to meet the private sector halfway.

84. The country needs to improve agricultural resilience by installing irrigation systems. Improved irrigation systems and broader access to electricity and finance would support higher employment, economic growth and poverty reduction during prolonged dry spells and water shortages. These factors work hand in hand – electricity powers irrigation systems and deep tube-well pumps, and access to finance facilitates the building and maintenance of all three. However, the country must also review high electricity charges, such as demand charges.

b) Improving rural infrastructure and supporting small-scale farmers.

85. The government needs to invest in rural infrastructure to make it easier for farmers, especially small scale and subsistence farmers in rural areas to reach the markets. There is recognition of the need to facilitate and to make it easier for farmers, especially small scale and subsistence farmers in rural areas as well as agricultural producers, to profitably sell their products to the domestic market and for potential buyers to have access to products that are in the market. The country has made strides in ensuring that farmers produce meet the markets. However, more must be done especially in improving infrastructure. Moreover, infrastructure development requires water supply and irrigation systems, farm-to-market roads, railways, airports, marketplaces, storage facilities, information and communication technologies (ICT), energy, and rural electrification.

c) Enabling policies

86. The government should finalize long-standing bills and regulations to boost investor confidence. The challenges associated with the delay in the implementation of regulations and bills create obstacles in attracting investors to the country. Bills that have been outstanding for several years should be finalized or the country should set a limit to how long a bill can be outstanding for, and after that period, it should be taken off the roll.

87. The government should consider making importation of semi-skilled workers possible, especially for certain industries where there are limited skills. Industry has complained about workers being reluctant to uproot their lives for a two-year work visa, while Namibian workers resign after receiving the training. It might be prudent for the Government of Namibia to introduce less stringent work visa applications for certain industries. The Government could consider the hiring of skilled retired farmers to improve the agriculture sector. Other interventions by the country authority is the need for permanent solution to the skills gaps as commonly underscored by introducing practical agriculture as a required subject in public schools from elementary level. Furthermore, the National Youth Council should include courses on agriculture to support upskilling in the sector.

88. The ongoing work to further integrate the national payment systems of Namibia and Angola into the SADC regional cross-border real-time gross settlement (RTGS) as part of efforts to facilitate trade in the sub-region and between the neighbouring countries should be expedited. This should be complemented with the speedy elimination of other non-tariff barriers as well as investment and improvement in both soft and physical infrastructures to facilitate trade. By doing this, trade between Namibia and Angola can be strengthened. In addition, as part of the African Continental Free Trade Agreement (AfCFTA), Namibia should leverage on the Inclusive Instant Payments Systems in Africa launched by the African Union[33] to boost trade within the continent.

ii. Animal products

89. Support the design and implementation of marketing strategies to enhance the brand identity of Namibian beef products and highlight their premium qualities at the retail shelf. Namibian beef's unique qualities and sustainable production practices should be publicized to build brand loyalty. Namibian beef is known for being hormone-free and antibiotic-free, raised on natural rangelands. The industry's commitment to strict animal welfare and traceability standards is unwavering, contributing to its reputation for high-quality beef and sustainability. These qualities should be used to market the beef and penetrate more markets.

[33]Now led by Africa Export-Import Bank (Afreximbank) in partnership with the AfCFTA Secretariat and dubbed the Pan-African Payment and Settlement System (PAPSS).

90. Create a more resilient and sustainable agricultural system by applying the circular agriculture principles to increase feed production. Fodder costs remain high, and the import bill increases significantly during drought years. Therefore, the country should use a circular agricultural farming practice to reduce import bills. Practices such as crop rotation, composting, and integrated pest management are examples of circular agriculture methods that enhance soil health, reduce chemical inputs, and promote biodiversity[34]. This is also a way of increasing feedlots in the country, as done on the Musese Green Scheme. The Green Scheme puts the cattle on the sections of the farms that have been harvested to feed the cattle while increasing ground fertility.

iii. Crop products

91. Investment in fertilizer manufacturing in Namibia is required to reduce the burden of fertilizer costs thereby reducing input costs. Local manufacturing of this agro-input could reduce prices as it will ease the burden of logistics costs. The country should leverage and embrace the current hydrogen projects to increase fertilizer production in the country. Moreover, this will produce low-carbon footprint fertilizers. Domestically produced green hydrogen and ammonia can help reduce Namibia's dependence on imports for inputs, enhance food security and limit emissions from fertilizer manufacturing.

92. Raw materials imported into the country that are used as intermediate goods to produce finished goods should not be subjected to unnecessary levies. The raw material (wheat) needed to produce pasta is imported and is used in the production of pasta in Namibia. The wheat is sourced from available global origins, but upon entry to Namibia, it becomes 5 percent more expensive due to the 5 percent NAB levy. If pasta is exported to the Southern African market, it will face a disadvantage when competing with South African or other global pasta manufacturers, as pasta exports are indirectly taxed in Namibia. Although NAB uses this levy for research and agricultural growth in the country, it is making the millers worse off and killing the industrial process.

iv. Fruits products

93. The country, with key agricultural players, should invest in capacity-building programmes that are focused on farmers and other interested parties in the agro-processing of fruits and vegetables. The main actors in the horticulture agro-processing sector should be represented at NAB platforms, for the smooth facilitation, control, and development of the sector; and agro-processing should be a Chapter in the 5-year Crop Value Chain Strategy that is being developed by the NAB, to have targeted interventions that will stimulate agro-processing in Namibia.

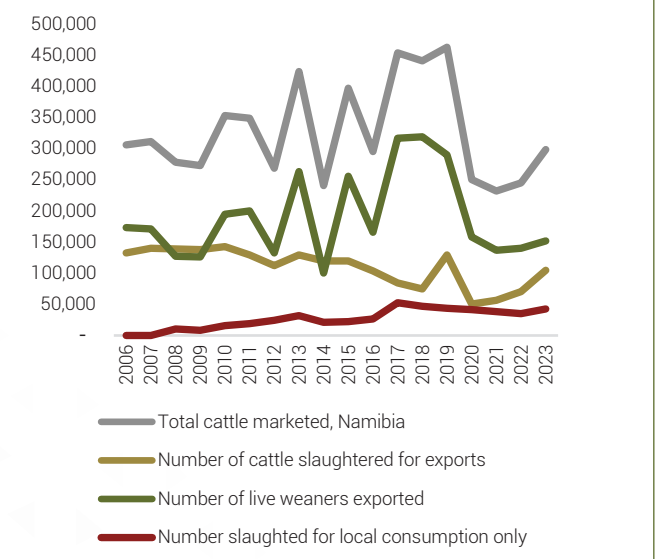
94. The country needs to diversify into different varieties of the products the country produces to which they have a competitive advantage. Namibia currently produces fresh produce meant for raw consumption, such as onions, tomatoes and table grapes. However, since the country is already integrated into the global market in these products, the country can diversify and add different seed varieties of the same products, such as diversifying into grapes for wine or tomatoes for tomato paste/sauce.

95. Investigate the feasibility of cost-effective shipping options and partnerships, especially with the new container terminal at the Walvis Bay port. Walvis Bay is seen as a viable export hub, with potential for increased cargo from Namibian and South African growers. Shipping through Walvis Bay saves around four days of shipping compared to Cape Town, ensuring fresher fruit for customers. However, there are challenges, like the 508 km longer round trip for trucks from Aussenkehr compared to Cape Town. Nonetheless, it's predicted that the competitive logistical solution provided by Walvis Bay will surely attract more cargo from Capespan and others in the future.

[34] https://www.sustainableagriculture.eco/post/circular-economy-principles-applied-to-agriculture-from-farm-to-fork#:~:text=Practices%20such%20as%20crop%20rotation,resilient%20and%20sustainable%20agricultural%20systems.

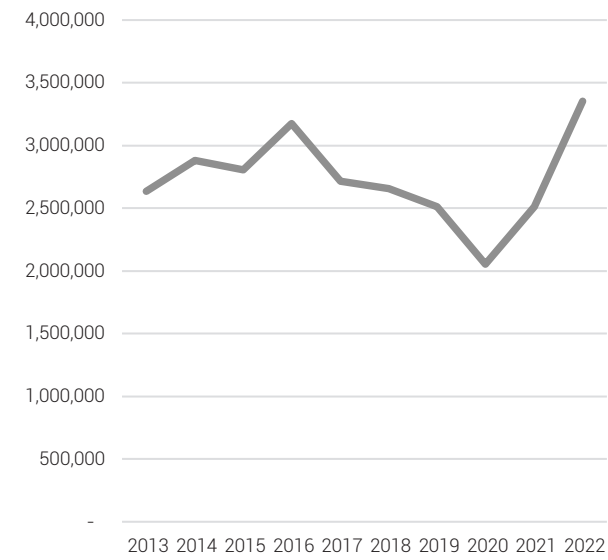
Appendix A: Production numbers

Figure 1: Number of cattle marketed in Namibia



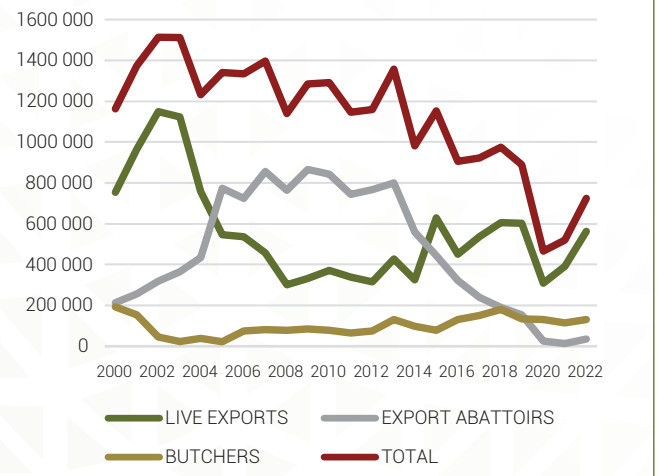
Source: Bank of Namibia

Figure 2: Number of cattle (herds)



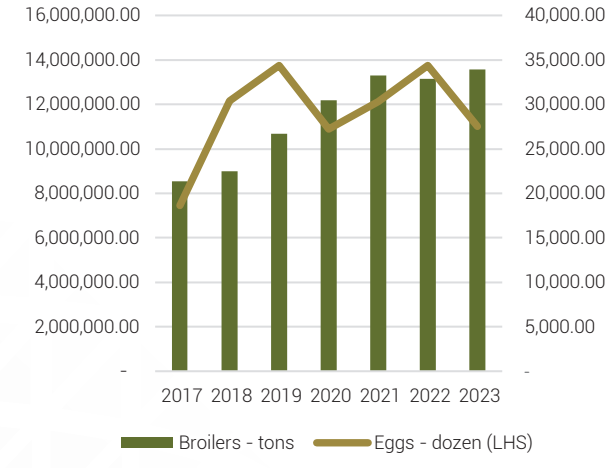
Source: DVS

Figure 3: Number of Small Stock Marketed



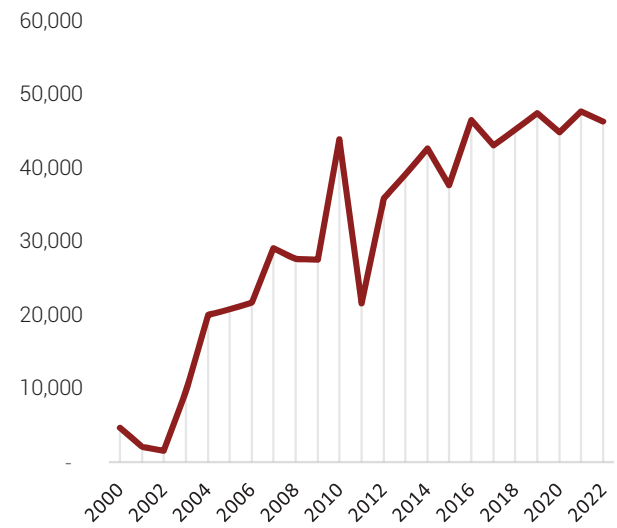
Source: Namibia Agricultural Union

Figure 4: Poultry and egg production numbers



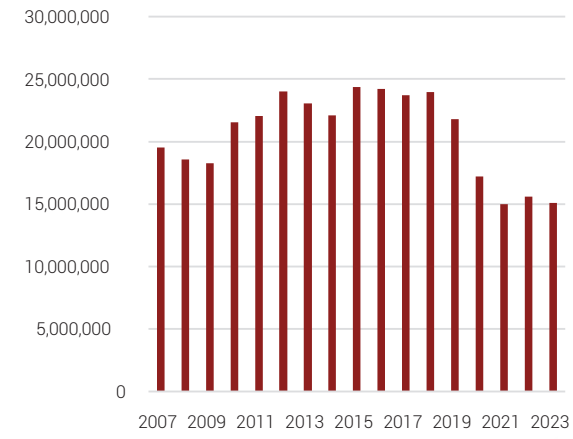
Source: Livestock and Livestock Board of Namibia

Figure 5: Number of Pigs Marketed



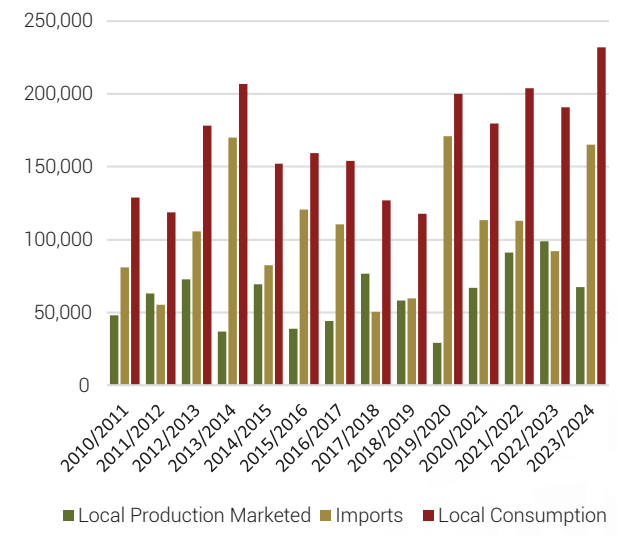
Source: Namibia Agricultural Union

Figure 6: Poultry and egg production numbers



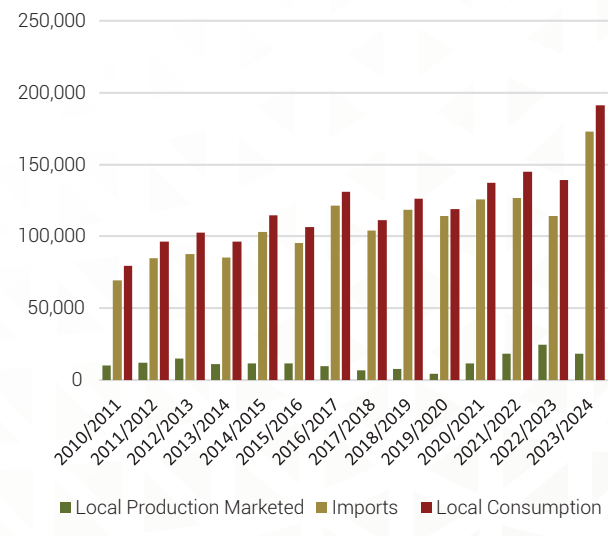
Source: Livestock and Livestock Board of Namibia

Figure 7: White Maize - 2010/2011 to 2023/2024



Source: Namibia Agricultural Union

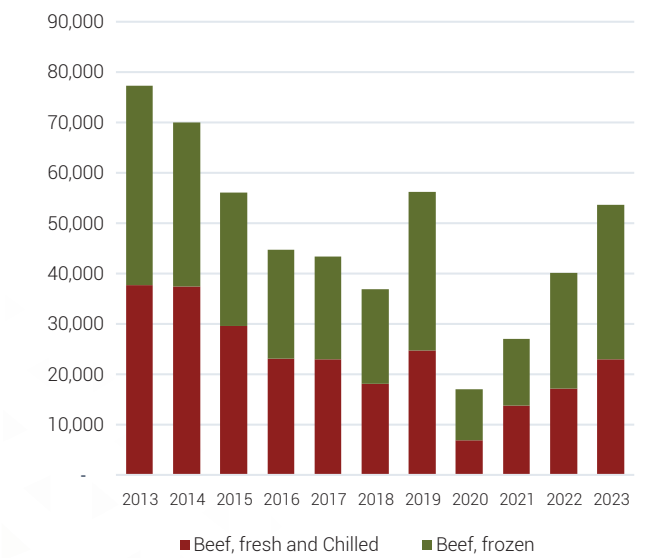
Figure 8: Wheat - 2010/2011 to 2023/2024



Source: Livestock and Livestock Board of Namibia

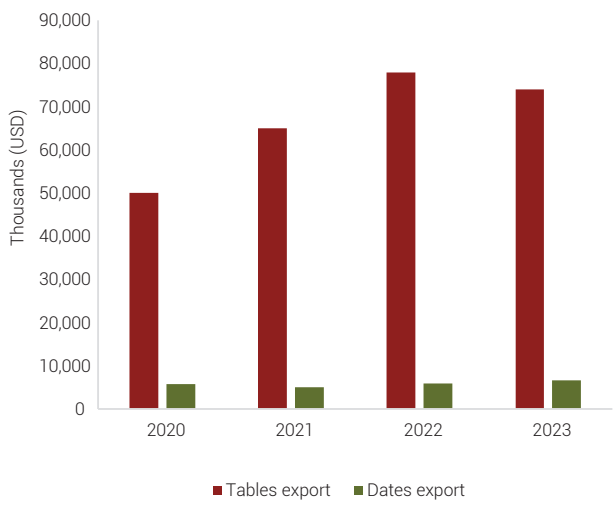
Appendix B: Export numbers

Figure 9: Namibia beef exports in USD $'000, 2013 -2023



Source: FAOSTAT; ITC Trade map

Figure 10: Namibia export of grapes and dates USD $'000



Source: FAOSTAT; ITC Trade map and NAB

Table 1: Top 10 export products and export partners, 2023

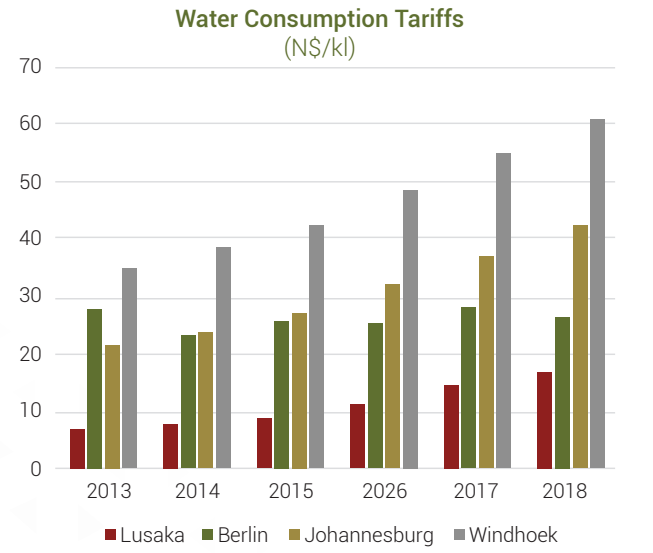
Exported product	Value (N$)	Export partners
Grapes	1,304,474,516.15	Netherlands, United Kingdom, Germany, South Africa, Spain, Belgium, Ireland
Live bovine animals	1,048,506,971.25	Netherlands, United Kingdom, Germany, South Africa
Live sheep and goats	869,110,820.11	Germany, Netherlands, United Kingdom, South Africa, Spain
Meat of bovine animals, frozen	570,996,852.64	Netherlands, South Africa, China, Malta, Ireland
Pasta	489,269,870.88	South Africa, Italy, Zambia, Zimbabwe, Norway
Meat of bovine animals, fresh	434,621,436.87	Zimbabwe, Netherlands Antilles, Norway, Uganda, Netherlands
Onions, shallots, garlic, leeks…	177,442,035.36	Netherlands, United Kingdom, Ireland, Portugal, Kenya
Tomatoes	162,294,970.51	United Kingdom, Malaysia, Nigeria, Austria
Dates, figs, pineapples etc	139,900,741.19	Netherlands Antilles, Maldives, South Africa, Tanzania, Malaysia
Meat of sheep or goats,	90,985,324.52	Malaysia, Maldives, United Arab Emirates, Norway, Netherlands Antilles

Table 2: Bilateral regional/trade agreements between Namibia and other countries

Country / Region	Type of bilateral Trade Agreement
INDIA	Economic Co-operation Agreement
ZIMBABWE	Preferential Trade Agreement
CHINA	Agreement on Trade and Economic Co-operation
CONGO BRAZZAVILLE	Economic Co-operation Agreement
DRC	Agreement on General Cooperation and creation of Namibia - Congolese Joint Commission of Cooperation
ANGOLA	Agreement on Trade and Economic Co-operation
	Agreement on Trade and Economic Technical Co-operation
GHANA	Trade and Economic Cooperation Agreement
INDONESIA	Agreement on Trade and Economic Co-operation
RUSSIA	Economic Co-operation Agreement
MALAYSIA	Economic Co-operation Agreement
VIETNAM	Economic Co-operation Agreement
NIGERIA	Economic Co-operation Agreement
KENYA	Economic Co-operation Agreement
CUBA	Economic Co-operation Agreement
BRAZIL	Free Trade Agreement
SADC	Customs Union Agreement
SACU	Economic Partnership Agreement (EPA)
EUROPEAN UNION	Preferential Trade Agreement
SACU - MERCOSUR	Free Trade Agreement
SACU - EFTA	This is envisaged Free Trade Agreement and Namibia is participating
TRIPARTITE FTA	This is envisaged Free Trade Agreement and Namibia is participating
CONTINENTAL FTA	This is envisaged Free Trade Agreement and Namibia is participating
SACU- INDIA	This is envisaged Preferential Trade Agreement and Namibia is participating
AGOA	Preferential market access arrangements

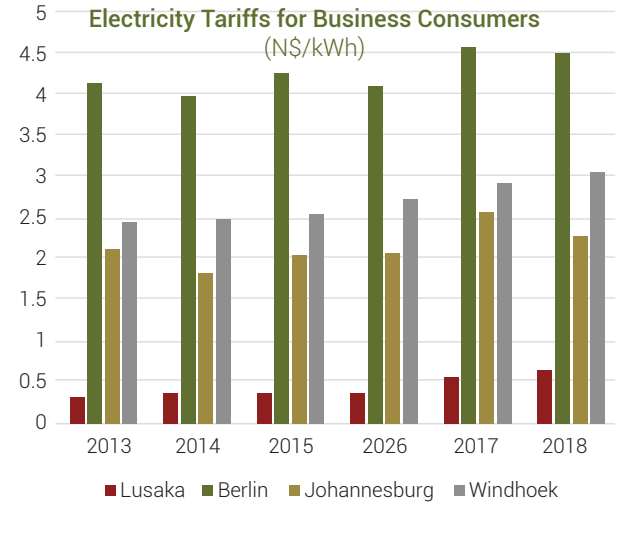
Appendix C: Input costs

Figure 11: Regional Electricity and water tariffs comparisons



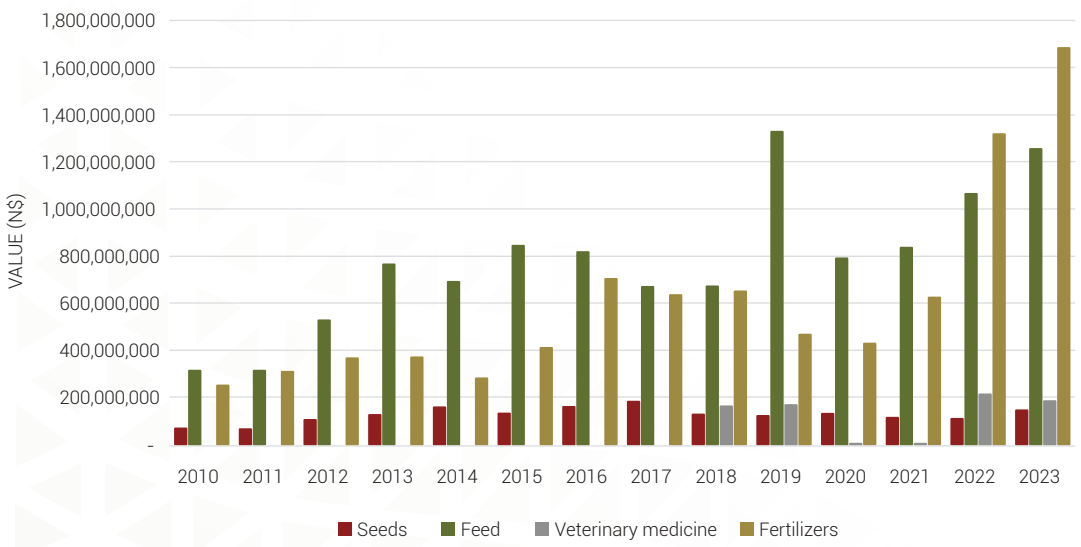
Source: Ombu Capital

Figure 10: Namibia export of grapes and dates USD $'000



Source: Ombu Capital

Figure 12: Input cost – import bill



04

Namibia Leveraging Global Value Chains in Agriculture: Insights from International Practices

04

Namibia Leveraging Global Value Chains in Agriculture: Insights from International Practices

by Dr. Patrice Talla Takoukam[35]

Mr. Roy Machoko

1. Abbreviations

AGVCs	Agricultural Global Value Chains
ECLAC	Economic Commission for Latin America and the Caribbean
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GVC	Global Value Chain
IMF	International Monetary Fund
SACU	Southern Africa Customs Unio
SADC	Southern Africa Development Community
VS	Vertical Specialization

2. Abstract

Namibia's agricultural sector presents a significant opportunity to participate in global value chains (GVCs). Building on its national potentialities and strategically aligning with international markets, Namibia can enhance its export competitiveness, generate employment opportunities, and drive rural development.

This study explores the potential of Namibia's agricultural sector to integrate into GVCs. It analyzes existing agricultural products with export potential, identifies key challenges and opportunities, and proposes strategies for effective participation. Key areas of focus include:

- **Product diversification:** Expanding the range of agricultural products beyond traditional commodities to capture higher-value markets.
- **Quality improvement:** Implementing rigorous quality standards to meet international requirements and enhance product reputation.
- **Infrastructure development:** Investing in transportation, storage, and processing facilities to ensure efficient supply chain management.
- **Policy support:** Creating a conducive policy environment that promotes agricultural exports, attracts foreign investment, and addresses regulatory barriers.
- **Capacity building:** Providing training and technical assistance to farmers, producers, and exporters to enhance their capabilities.

By strategically leveraging GVCs, Namibia can position itself as a reliable and competitive supplier of agricultural products, contributing to sustainable economic growth and poverty reduction.

Key Words

Global Value Chains (GVCs), Systems, Institutions, Inclusion, Sustainability

[35] Food and Agriculture Organization – Harare, Zimbabwe

1. Introduction

This paper explores the significance of agriculture value chains within the broader food system of Namibia. It examines how well-organized and efficient Agricultural Global Value Chains (AGVCs) contribute to achieving multiple objectives, including delivering healthy diets, enhancing a Namibia's export capabilities as well as enhancing the competitiveness of smallholder agriculture system in Namibia. By drawing on successful examples from other countries, the paper identifies potential entry points for integrating Namibia's smallholder agriculture into Global Value Chains (GVCs) as a means of enhancing competitiveness.

The concept of GVCs involves integrated activities of commodity activities with outsourced processes in at least 1 foreign country, thus interlinkages across firm in different locations. This arrangement enhances value chain competitiveness. According to Hernández, 2014, the global value chain (GVC) framework shows how a sector participates in the sequence of activities required to bring a product or service from its initial conception to production and sales.

Agriculture constitutes a pivotal sector within Namibia's economy, contributing an average of 4% to the Gross Domestic Product (GDP) over the past five years, as reported by the U.S. Department of Commerce in 2024. Livestock production dominates the sector, accounting for approximately two-thirds of output, while crop cultivation and forestry comprise the remaining third.

Namibia's predominantly arid climate, characterized by low and erratic rainfall, poses significant challenges to agricultural development. Drought is a recurring issue, severely limiting the potential for diversified crop production. While these conditions hinder overall agricultural performance, certain high-value commodities, such as grapes and dates, have demonstrated resilience and export potential.

To address the constraints imposed by the challenging environment and optimize the sector's performance, this paper explores opportunities to enhance Namibia's most promising agricultural value chains through strategic integration into global and regional markets. As a member of the Southern African Development Community (SADC) and the Southern Africa Customs Union (SACU), Namibia can leverage these platforms to strengthen its agri-food value chains.

By capitalizing on both vertical and horizontal integration within value chains, Namibia can participate effectively in global value chain networks. This involves exporting primary commodities that serve as inputs for other countries' production processes, as well as importing essential agricultural commodities for domestic production.

Through these strategic approaches, Namibia can mitigate the impacts of its challenging climate, increase the value of its agricultural exports, and enhance food security for its population.

Fundamentals of Effective Value Chain Development

An effective agricultural value chain is characterized by four key attributes

01 **Sustainability:** This encompasses both economic and environmental considerations. A profitable value chain ensures long-term viability, while incorporating climate-smart practices fosters environmental sustainability.

02 **Inclusivity:** Widespread participation across various societal groups is crucial. This includes integrating marginalized populations, empowering youth and women through decent work opportunities, and ensuring equitable distribution of benefits.

03 **Resilience:** The capacity to withstand and adapt to shocks, such as climate change or market fluctuations, is essential for long-term stability.

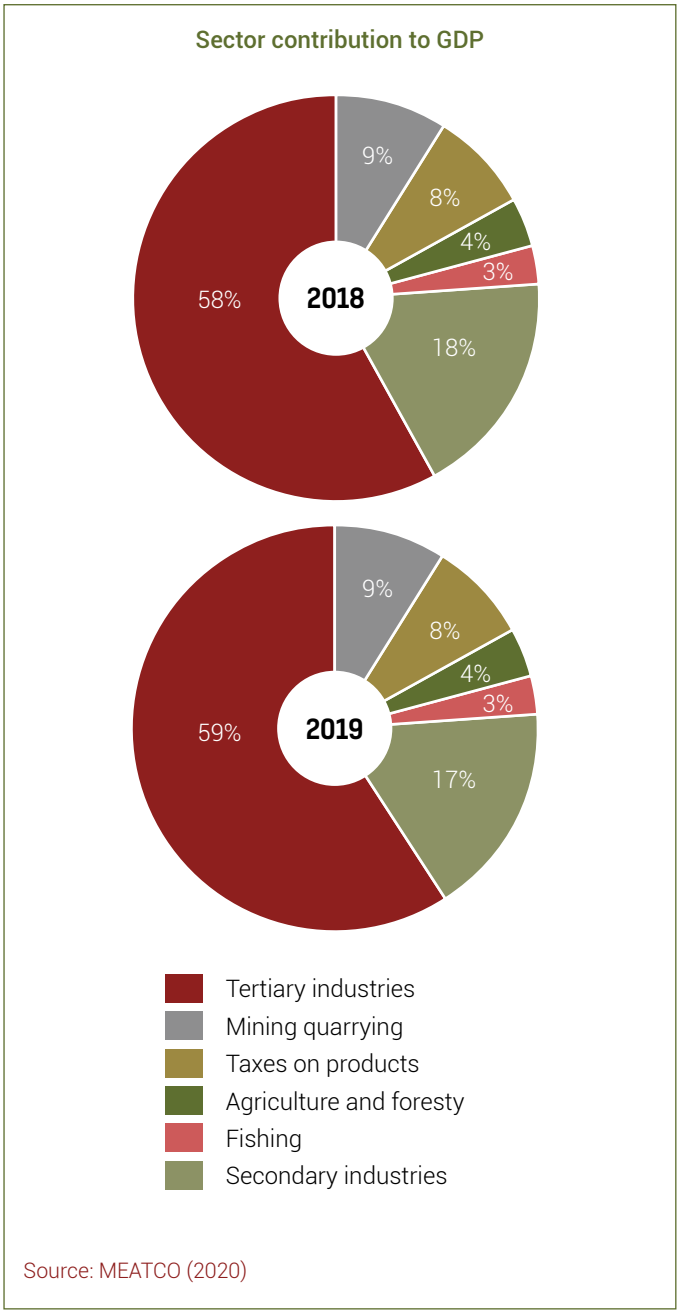
04 **Nutrition Sensitivity:**
While not all value chains directly involve food products, agriculture and food value chains hold a unique responsibility. They must be designed with "nutrition sensitivity" in mind, actively promoting the production and accessibility of nutritious food for consumers.

2. Country Context

Namibia's Agrifood and Aquatic Food Value Chains

Agriculture is an important sector for the Namibian economy. At least 70% of the Namibian population depends on Agriculture. According to GIZ's Business Scouts Report, 2021, a total of 77% of the agriculture sector's combined value is exported while 23 % is imported. Namibia produces only 43% of its food demand. Different growth strategies are required for net importers versus net exporters. Net importers need continued protection against unfair competition, while net exporters need internationally competitive export value chains to unlock their potential.

Figure 1: Namibia's Sector Contribution to GDP



Source: MEATCO (2020)

Namibia's Agriculture sector contributes around 4% to the GDP, with the mining sector being the largest contributor with nearly 60% contribution.

Agricultural trade is pivotal to Namibia's economy, with 77% of the sector's total value derived from exports and 23% from imports. The country's food self-sufficiency stands at 43%, highlighting a substantial reliance on agricultural imports. Consequently, distinct growth strategies are essential for net importers and exporters. While net importers require ongoing safeguards against unfair competition, net exporters must cultivate internationally competitive value chains to maximize their potential. South Africa is Namibia's primary import source, with food products constituting the bulk of these imports. This is largely attributable to the country's arid climate, intensified by recent rainfall deficits. While Namibia produces cereals like wheat, millet, and sorghum—staple foods—imports remain essential to meet domestic demand. Other key import origins include the Netherlands, Germany, Russia, and Morocco.

Historically, live animal exports, primarily cattle and sheep, have accounted for approximately two-thirds of agricultural export value. In 2019, Namibia exported around 12,400 metric tons of meat, primarily to the United States, Europe, South Africa, and China. Livestock farming continues to be a significant foreign exchange generator.

Table 1: Namibia's Agriculture Comodity Exports

Net Exports 2027/18	NAD	EUR
Cattle	3.4 billion	195.2 million
Sheep and Goat	830 million	47.7 million
Grapes	818 million	46.9 million
Trophy hunting	540 million	31 million
Charcoal	185 million	10.6 million
Total	5.77 billion	331.4 million

Source: MEATCO (2019)

Animal products, live animals, and crop exports collectively represented roughly 10.7% of total Namibian exports in 2019. The government promotes local agricultural sourcing, mandating retailers of fruits, vegetables, and other crops to procure 27.5% of their stock from domestic farmers.

Namibia's wildlife conservancies sector is experiencing rapid growth, emerging as a dynamic economic driver. Despite its predominantly arid and semi-arid climate, Namibia cultivates a diverse range of crops, including cereals, fruits, and horticultural products. The latter encompasses a variety of fresh produce such as tomatoes, potatoes, carrots, cabbage, butternuts, beans, groundnuts, dates, grapes, watermelons, melons, and citrus, primarily grown under irrigation. Cereals produced in the country include maize, pearl millet, wheat, and sunflower. Onions are the most significant vegetable export, with South Africa and Angola as primary destinations.

3. How can Namibia, enhance its value Chains Leveraging on Global Value Chains and improve its competitiveness?

Namibia experiences economic dependency at the regional level, and most trade and economic relationships are mainly with Botswana, Lesotho, Swaziland and South Africa, all of which are members of the Southern African Customs Union (SACU) and Southern African Development Community (SADC). Onions are the most significant vegetable export, with South Africa and Angola as primary destinations. Within the SADC and SACU arrangement, Namibia's export products are covered under a duty-free arrangement particularly in SACU countries, i.e. Botswana, Lesotho, South Africa and Swaziland. Within SADC there is still a need to strengthen economic integration to ensure a free trade area.

Concept of Global Value Chains

According to World Bank, in its World Development Report 2020, "A global value chain or GVC consists of a series of stages involved in producing a product or service that is sold to consumers, with each stage adding value, and with at least two stages being produced in different countries. These are vertically fragmented production processes. A firm participates in a GVC if it produces at least one stage in a GVC. According to Amachraa, et al, 2022, GVC is the fragmentation of global production between several countries and companies advocating investing in an ecosystem of suppliers. At the same time, it also promotes the transfer of technologies and good practices. GVCs can be defined as the full range of activities – dispersed across different countries – that firms and workers engage in to bring a product from its conception to its end use (Gereffi and Fernandez-Stark, 2011).

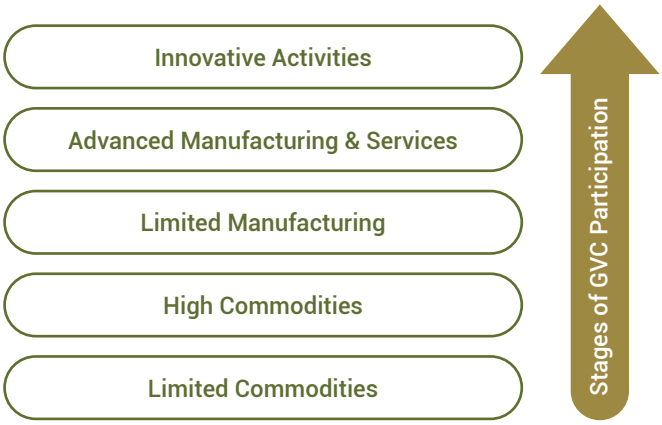
Globalization has revolutionized the ways agro-enterprises engage in business. Food production has become easier, quicker and more accessible as a result of interconnected global value chains and a sharp increase in demand for food, FAO, 2021 Global Value Chains contribute 60% of world trade and directly employ about 453 million people (UNCTAD, 2019; OECD, 2021; ILO, 2016). According to the World Bank's Report on Trade for Development in the Era of Globalization of Value Chains, countries in GVC networks have benefited from increased foreign direct investment, productivity, additional jobs, and improved living standards of local populations. Since the 90s, the dynamics of GVC have grown at an average annual rate of around 8%, more than double the growth recorded by global GDP (OECD, WTO, 2021). Thus, trade in value-added has proliferated since the 90s; it increased from 2071 to 9,976 billion US dollars between 1995 and 2018 (OECD Tiva database, 2021). Morocco's level of participation in GVC is much more competitive than in many African countries (World Bank, 2012 & 2020).

Recent literature suggests that innovation is not confined within national boundaries; rather, innovation processes can be fragmented and distributed across borders, giving rise to Global Innovation Networks (Kano Citation2018; Mudambi and Puck Citation2016; Ryan, Gibbons, and Osburg Citation2020; Szapiro and Mao Citation2018). GVCs and offshoring create a unique global platform for businesses to access external knowledge, fostering innovation (Perri, Scalera, and Mudambi, 2017).

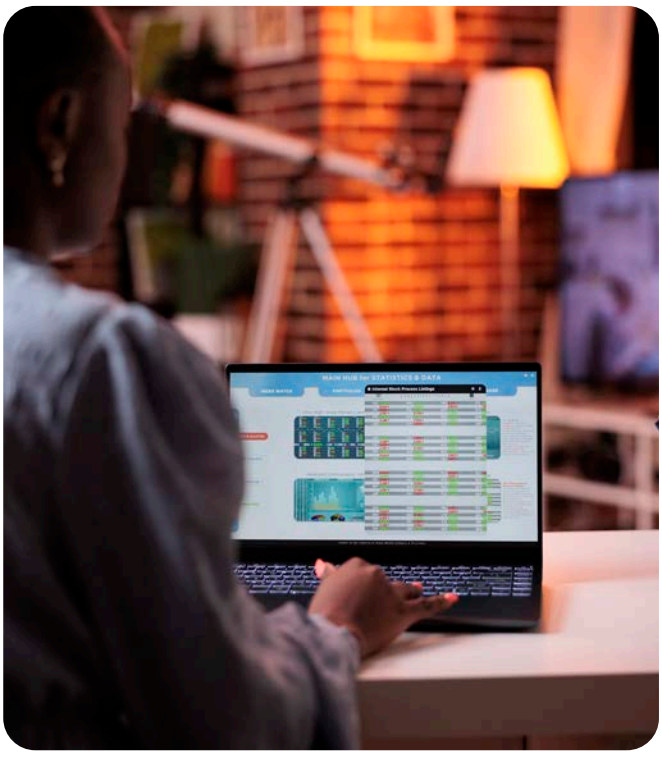
Measuring Participation in Global Value Chains

Efforts have been made to establish systematic measures of a country's participation in Global Value Chains (GVCs) through the Global Value Chain Participation Index. This index is expressed as a percentage of gross exports, indicating the share of foreign inputs (backward participation) and domestically produced inputs used in third countries' exports (forward participation)

As domestically produced inputs may incorporate some of the foreign inputs, there is an overlap and potentially some double counting (the indicator is not based on value-added trade). Another way to ascertain participation is to measure the Vertical Specialization (VS) share. Vertical specialization is the import content of exports. the value of imported inputs in the overall exports of a country (the remainder being the domestic content of exports) (ECLAC, 2014).



Source: World Bank Group, World Development Report 2020: Trading for Development in the Age of Global Chains, 2019, World Bank: Washington DC



4. Learning from International Examples Cases for Morocco, Turkey, Luxembourg

Country Experiences Agriculture Global Value Chains (AGVCs)

Case Studies and Experiences

This section delves into specific examples of successful integration into Global Value Chains. Such practical cases provide valuable insights and learning points for countries like Namibia, providing potential entry points for Namibia to leverage on Agricultural Global Value Chains. It analyses how these respective countries have upgraded their value chains leveraging on Global Value Chains and sustained economic growth through enhanced value chain performance. Experiences have been drawn from countries like Morocco, Bulgaria, Turkey, Luxembourg and other countries.importers versus net exporters. Net importers need continued protection against unfair competition, while net exporters need internationally competitive export value chains to unlock their potential.

Value Chain Planning and Infrastructure development: Morocco Case

Morocco has successfully developed Global Value Chains (GVCs) in different sectors like Automotive, textiles and Apparel and more importantly agriculture, for products like citrus fruits, olives, and vegetables. The agri-food sector occupies a vital place in the Moroccan economy. Indeed, it contributes up to 4% of GDP, a similar contribution to Namibia and employs more than 161,000 people directly through 2,100 national and foreign companies. It is thus the third largest export sector in the Kingdom after the automotive industry and phosphates, with an export value-added of US$3.9 billion (IMF, 2022). This sector is very diversified, the Kingdom is a major producer of fish, tomatoes, citrus fruits, olives, and argan which is a considerable asset for the development of agri-business. The sector is based on six strategic value chains: the fruit and vegetable valorization industry, dairy industry, biscuit and chocolate industry, pasta and couscous industry, olive oil industry, and meat industry.

Morocco is among the nations with a strong agri-food tradition and can adapt to new industrial, social, and environmental challenges and integrate the upstream and downstream agri-food value chains. Morocco has successfully integrated into global agricultural GVCs through several strategies, namely:

Focus on high-value crops: The country has specialized in the production of high-value crops, such as citrus fruits, tomatoes, and berries, which command premium prices in international markets.

Early market entry: Morocco was among the first African countries to gain access to European markets through preferential trade agreements, allowing it to establish a strong foothold in these markets. Namibia equally has market access to major markets like the European Union, for its Beef and this is a good starting point to analyses the country's participation in Global Value Chains.

Investments in infrastructure: The government of Morocco invested in transportation, storage, and processing facilities to improve the competitiveness of the agricultural sector. By investing in research and development, improving agricultural practices, and building processing facilities, the country enhanced its position in the global food market. The EU's proximity market is buoyant but protected by very strict health standards and essential labels. Indeed, the consideration of health and environmental conditionalities is essential for Morocco's participation in this GVC. The agri-food industry is particularly valuable. Its sustainable growth can certainly be encouraged by well-targeted incentives in terms of communication and research and development.

Private sector engagement: The role of private sector companies, both domestic and foreign, has been crucial in the development of Morocco's agricultural GVCs.

Morocco's commitment to value chain development has yielded impressive results especially bin agriculture where it has successfully developed value chains for products like citrus fruits, olives, and vegetables. According to the IMF report published in 2020, the Kingdom of Morocco is the 5th largest economy in Africa. Morocco's GDP has held steady at an average annual growth rate of 4.5% over two decades to reach US$122 billion in 2019.

The analysis of the structure of the Moroccan agriculture and agri-food GVC highlighted that the GVC encompasses several areas of economic activity namely agricultural inputs, services, production, transport, distribution, valorization, and marketing. It is an export opportunity for agricultural products incorporating added value (cleaned, packaged, treated products, etc.).

Morroco Focuses on
high-value crops.
which command premium prices
in international markets.

Public investment in research and development: By investing in research and development, improving agricultural practices, and building processing facilities, the country has enhanced its position in the global food market.

Institutionalized Value Chain Planning: These sectors are at the crossroads of three integrated sectoral plans: The Green Morocco plan (fruits and vegetables), the Halieutic plan (fish and seafood), and the Industrial Acceleration plan. This requires more effort in terms of coordination and synergies. The Moroccan agri-food sector has been resilient and supply chains have functioned properly thanks to national agricultural production and the exemplary solidarity of industrialists. The sector plans have succeeded in developing an offer in two directions:

1) acceleration of innovation and the upgrading of sectors, and
2) support for investment towards growth, export, and financing

The Role of Exporting Companies: Morocco has big exporting companies but not many of them. Experienced Moroccan producers have managed to develop long-term contracts and build trust relationships with exporters and distributors (supermarkets, for example). There are indeed strong links between Moroccan and European producers. For some sectors such as fish and tomatoes, buyers have high bargaining power because of the volume of their purchases. By strategically developing and strengthening export companies, the country can capitalize on its unique natural resources and competitive advantages. The country can support the development of new export companies which are focused on on specific agricultural commodities, such as livestock, grains, or fruits and vegetables. Joint Ventures, fostering partnerships with international agricultural companies to leverage their expertise and market access.Existing companies, can be further strengthened by

5. Investment:
Provide financial support, including loans, grants, and subsidies, to existing export companies.

6. Infrastructure:
Improve infrastructure, such as roads, railways, and ports, to facilitate the efficient transportation of agricultural products.

7. Technology:
Promote the adoption of modern agricultural technologies, including irrigation systems, pest control methods, and processing equipment.

8. Market Research:
Assist export companies in conducting market research to identify new export markets and understand consumer preferences.

9. Certification:
Facilitate the acquisition of necessary certifications, such as organic or fair trade, to meet international standards.

Role of Government: The Government of Morocco plays I pivotal facilitation role in the upgrading of value chain sin the country. According to Amachraa, et al, 2022, the government provides a subsidy to industrial ecosystems and supervises access to bank credits. Various international institutions recognize the model of integration of the Moroccan economy in the different GVCs as an effective model. Green Morocco Plan is a critical enabler of the value Chain development in Morocco, as this is part of the coordinated "Royal Vision". Namibian Government have a greater responsibility through its various policies and they can possibly consider the following actions:

Trade Policies: Implement favorable trade policies, including tariff reductions and export incentives, to encourage exports. Negotiations: Negotiate trade agreements with key markets to reduce barriers to trade.

Investment Promotion: Invest in marketing and promotion efforts to increase awareness of Namibian agricultural products in international markets.

Capacity Building: Provide training and capacity-building programs for agricultural producers and exporters.

Productivity as a driver of Global Value Chains: Turkey Case

Turkey's value chains are geographically diversified, and the country is substantially engaged in at least two regional value chains. Turkish firms are established as part of GVCs across multiple sectors and regions, with GVCs accounting for a large share of Turkey's exports. Rising GVC participation has gone hand-in-hand with increased value-added from exports. From 2001 to 2017, incomes per capita in Turkey doubled in real terms and tripled in current dollar terms. Turkey transformed from a lower-middle-income country (LMIC) at the start of the 2000s to very nearly reaching high-income status by 2014. This drove a rapid fall in poverty from above 30 percent to just 9 percent.

Turkey's participation remains relatively low, its products are of limited sophistication and innovation earnings are limited. World Bank, 2021. GVC exporters in Turkey are highly productive, large employers, employing four times as many employees, who are each twice as productive compared to the average domestic firm. Domestic GVC supply chains have expanded, but GVC suppliers can do more to realize productivity gains. Unlike Turkey, Namibia is experiencing productivity challenges. According to a 2021 Word Bank Report, Namibia may be stuck in the so-called "middle-income trap," with slow productivity growth making it unlikely that the country can catch up with the more advanced economies in the near future.

In order to leverage on Global Value Chain in agriculture Namibia has to promote enabling business environment for private sector, promote productive job creation. Boosting labor demand in agriculture through investment in labor-intensive activities would create jobs, deliver needed productivity gains, and reduce inequality.

Luxembourg Case

Luxembourg and Namibia are two countries with starkly different geographical, economic, and cultural landscapes. While Luxembourg is a small, landlocked nation in Western Europe known for its high standard of living and financial sector, Namibia is a vast, arid country in Southern Africa with a rich natural heritage and a focus on agriculture and tourism.

Luxembourg, despite its small size, it plays a significant role in global value chains. It acts as an important chain-link in GVC as evidenced by its strong upstream and downstream interconnections with other partner countries. Luxembourg is primarily a buyer of foreign value added and less a seller of domestic value added. The major part of Luxembourg's GVC trading partners is located in Western Europe suggesting that the supply chain network is not global for Luxembourg but rather regional. Notwithstanding this, the share of East Asian and Eastern European emerging countries - albeit relatively low compared to advanced economies - is increasing over the period of analysis.

Key Characteristics of Luxembourg's GVC Involvement:

- **Financial Services Hub:** Luxembourg is renowned for its robust financial sector, serving as a major center for banking, insurance, and investment funds. This sector plays a crucial role in facilitating cross-border transactions and supporting GVC activities.
- **International Holding Company:** Many multinational corporations use Luxembourg as a location for their international holding companies. These companies can benefit from Luxembourg's favourable tax regime and its strategic location for managing global operations.
- **Logistics and Distribution:** Luxembourg's central position in Europe makes it an ideal location for logistics and distribution centers. Its well-developed infrastructure, including its airport and rail network, facilitates the efficient movement of goods within and beyond the region.
- **Research and Development (R&D):** Several multinational companies have established R&D facilities in Luxembourg, attracted by the country's skilled workforce and favorable research environment. These facilities contribute to the development of new technologies and products.

10. Recommendations and Conclusion

This study has examined the potential of Namibia's agricultural sector to participate in global value chains (GVCs). It has identified key opportunities and challenges, and proposed strategies for effective integration. By diversifying product offerings, improving quality standards, investing in infrastructure, and implementing supportive policies, Namibia can enhance its export competitiveness and capture higher-value markets.

Based on the findings of this study, the following recommendations are offered:

01 **Diversify agricultural production:**
Promote the cultivation of high-value crops and livestock species that are in demand in international markets.

02 **Invest in quality improvement:**
Implement rigorous quality control measures and certification programs to meet international standards.

03 **Enhance infrastructure:**
Prioritize the development of transportation, storage, and processing facilities to ensure efficient supply chain management.

04 **Create a supportive policy environment:**
Implement policies that promote agricultural exports, attract foreign investment, and address regulatory barriers.

05 **Foster partnerships:**
Encourage collaboration between farmers, producers, exporters, and government agencies to strengthen value chains and improve market access.

06 **Invest in capacity building:**
Provide training and technical assistance to farmers, producers, and exporters to enhance their skills and knowledge.

07 **Promote sustainable agriculture:**
Adopt practices that minimize environmental impact and ensure long-term sustainability of agricultural resources.

By implementing these recommendations, Namibia can effectively leverage Global Value Chains to drive agricultural development, create employment opportunities, and contribute to sustainable economic growth.

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05

Integrating Namibia's Agriculture into Global Value Chains: Strategies and Policy Options for Namibia

05

Integrating Namibia's Agriculture into Global Value Chains: Strategies and Policy Options for Namibia

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a) Introduction

1. Agriculture is considered an important sector in Namibia, principally because about 70 percent of the country's population depends directly or indirectly on it for their income and livelihood. Compared to many other African countries, the sector is relatively small, with its contribution to GDP estimated at only about 6.5 percent in contrast with a continental average estimated by the OECD-FAO (2016) at about 15 percent. This is largely because only about 2 percent of the country's land area receives sufficient rainfall for farming, especially for crop farming. Hence, leveraging sector growth and transformation for improved livelihoods for a majority of the population cannot be achieved by relying only on actions to boost output growth. It also requires scaling up exploitation of opportunities for value addition in agriculture, for example, through increased participation in Global Agricultural Value Chains (GAVCs).

2. Policymakers in Africa are paying attention to the option of participation in GAVCs by local firm, especially after the African Union (AU) launched the African Continental Free Trade Area (AfCFTA). This initiative is expected to open up access to a huge continental market with over 1.3 billion people and a combined GDP of over US$3.4 billion. Using Ghana as to illustrate its benefits, a study by Bayele et al. (2020) estimate incremental annual net trade gains by the country at about US$157 million. This is largely due to a projected 13 percent rise in commodity exports into African markets. AVCs are expected to play an important role in driving this uptick in subregional trade. These authors project likely revenue loss due to the removal of tariffs. However, the estimated revenue loss, is over-compensated by the incremental trade gains as it represents only about 5 percent of the estimated annual figure above. Removing tariffs on subregional imports will also enhance the welfare of domestic consumers.

3. In this paper we discuss GAVCs, highlighting not only the anticipated opportunities and benefits but also some of the challenges which need to be addressed through strategic and policy interventions. The discussions include definition of GAVC and a brief overview of the economic, social and environmental benefits that Namibia and other African countries can gain by being well-positioned to participate in such chains. The challenges that need to be addressed are identified, including those which arise when targe value chains are exposed to competitive pressures in global, subregional and continental markets. This is followed by discussions on cases showing how strategic interventions in agricultural value chains can produce tangible and sustainable benefits. What has to be stressed here is that these interventions are not about increasing exports into global markets but rather target boosting supplies into subregional and domestic markets. Urbanization is driving domestic demand for convenient but nutrient-dense and safe foods and beverages. The cases show the potential of GAVCs in meeting such demand. The policies and strategies worth exploring in promoting engagement in GAVCs are highlighted in the concluding sections.

b) Defining Global Agricultural Value Chains (GAVCs)

4. In his seminal work on value chains, Michael Porter (1980 and 1985) outlined strategies that companies adopt to gain advantage over their competitors. The focus was on intra-company actions which are implemented to ensure that value is optimised at each stage of a chain of activities, from pre-production through marketing and provision of after-sales services.

5. Following a multi-country study, however, Porter (1990) concluded that countries can enjoy a competitive advantage through their companies by maintaining national economic environments that confer a competitive edge to firms in that industry. The emphasising the importance of choices and outcomes at industry-specific levels, he stressed that the competitive edge enjoyed by industries in the global market is influenced by national circumstances, those which affect their capacity to innovate to improve the quality of their products and/or enhance efficiency.

6. Porter's arguments attracted considerable interest from academics in business studies and development economics as well as policymakers but he also had his critics. For instance, Davis and Ellis (2000) strenuously argue that there are conceptual and methodology issues that need addressing as well as questions the robustness of some empirical propositions in Porter's Competitive Advantage of Nations.

70% of Namibia's population depends on the agriculture sector for income and livelihood

7. However, criticism of Porter's arguments is not the focus of this paper. It builds on the recognition that, increasingly, modern production does not occur exclusively in a single country. The process often involves cross-country chains where actors in different countries add value to a final product at different stages in the value chain. That is a major difference from the situation where, historically, firms produced goods from start to finish in one country and traded their final products with others. It has also become quite common for cross-border trade to involve not just exchange of finished goods but the sale of intermediate goods by different countries, making labels (e.g. "Made in X") rather redundant. In line with this, Antras (2016) report that over 70 percent of modern international trade involves finished products to which firms in several countries have contributed.

8. Taking note of this trend, Gereffi and Fernandez-Stark (2011) describe global value chains (GVC) as referring to the sequence of dispersed activities occurring in several countries through which raw materials are transformed into final consumer products. Manufacturing and assembling different components into a single finished product occur in multiple countries, with each step in the process adding value to the end-product.

9. We build on the above to define GAVCs as those which involve agricultural raw materials and products. Takoukam (2024) observes that GAVCs are characterised, among others, by division of the production process into different stages which are carried out in different countries or regions. The interconnected firms which are involved in this process are dependent on each other for inputs, components and/or services. They also tend to be governed by a complex set of governance structures which may include protocols on quality standards and international trade agreements. These chains that involve value addition across multiple borders account state that about 30% of global trade in food and agricultural products (Balliè et al. 2017).

10. Relative to most manufactured goods and non-food commodities, most food is low value-to-weight and perishable, so localized processing represents an important opportunity for major producers. However, traditionally, the bulk of exported agricultural commodities are processed by non-producing, richer countries. Notable examples of such commodities from Africa include cocoa, coffee, tea and rubber. The producing countries are dependent on these commodities for generation of foreign exchange as the level of domestic consumption is usually low (an average of about 7 percent in Africa; 10 percent in Asia and 22 percent in South America). There is, though, growing interest in scaling up opportunities for pre-export value addition in some of the producing countries, including exploiting opportunities in subregional markets. Dihel et al. (2018) cite several examples of this trend, including a shift away from exporting unprocessed maize grain to processed mealie meal (maize flour), non-alcoholic drinks and breakfast cereals from major-producing countries such as Zambia to import-dependent subregional markets in, for example, the Democratic Republic of Congo (DRC).

c) Benefits of participating in GAVCs

11. Scoppola (2021) identifies one of the benefits derived from participation in GAVCs as growth in productivity in the farm sector. This is confirmed in a cross-country study by Dihel et al. (2018), showing that average output per farm worker in selected African countries that they surveyed was higher for those contracted under GAVCs to produce maize and sorghum than it was non-participating farmers in those value chains. This increase in productivity and household income which is associated with participation in GAVCs is reported by Qiang et al. (2021) as being higher than what countries achieve through increased domestic production.

12. One of the explanatory factors for this was the role "lead firms" in the GAVCs. These firms, which are often large-scale enterprises, play strong coordination roles as part of the formal or informal contractual arrangements with actors such as smallholder farmers (usually as groups), food processors and traders. The contracts define the terms of supply chain participation and the role each group of actors plays in terms of value addition in the chain. They also take advantage of their substantial financial leverage to provide inputs, technologies, extension services and market information to, especially, producers. It is the technology and knowledge spillovers associated with participation in GAVCs that contributes to the rise in productivity and increase in farmers' income as well as employment creation.

13. There is also evidence showing that GAVCs can catalyse growth in cross-border movement of investment capital either as direct or portfolio investment by lead firms (Barrett et al. 2019). The inflow of private capital into GAVCs have been reported as going into transport/logistics, cold storage, preservation and processing (Liverpool-Tasie et al. 2017). They further report that wholesaling facilities and other physical infrastructure have benefited from such investments and contributed to improved access to more remunerative domestic, subregional and global markets. This is particularly the case where standards based on food safety and/or driven by global social movements limit access to remunerative conventional or niche (speciality) markets. It is a trend which Zezza et al. (2017) observed as being dominant in high-income countries but has in recent years become increasingly visible in middle-income developing countries. Mishra et al. (2024) also report evidence affirming that improved access to quality-sensitive but remunerative markets as a key motivation for participation in GAVCs.

14. In most African countries, urbanisation is driving up consumer demand for food away from home. Meeting this demand is catalysing product differentiation that relies on private as well as public food regulatory standards. The rapid expansion of fast-food chains, restaurants, cafés, institutional food service providers in urban areas in Africa in response to this trend has been likened to the recent supermarket revolution on the continent. The growing capacity to meet this need without becoming import-dependent has been associated with GAVC-linked investments in modern processing and wholesaling facilities (Pardey et al. (2016) as well as uptake of the results of research into, for example, transgenic crop varieties (Herring and Paarlberg, 2016).

15. Beck et al. (2024) provide evidence on the job creation effects associated with expansion of GAVCs in agriculture-dependent economies. Using a constructed panel data set for 140 countries for the period 1991-2015, they find that greater GAVC participation is associated with an increase in agricultural employment growth. They further find that the positive job creation impact is mainly driven by the processed food sector downstream rather than the raw commodity segments upstream. Though they find considerable heterogeneity, the impacts tend to be more pronounced in middle-income countries than in low income ones.

16. Participation in GAVCs is also linked with higher GDP growth prospects as well as capacity to increase foreign exchange generation and employment creation (Lim and Kim, 2022). This is especially the case when such participation improves access to strong agri-food demand hubs such as China (Greenville et al. (2017). Focusing on Nigeria, Ogunyele (2014) finds evidence which confirms his hypothesis that the development of GAVCs in that country contributes to inclusive economic transformation. He attributes this, in part, to the associated benefits from technology upgrades and export diversification.

d) Risks and challenges in promoting GAVCs

17. Among the risks identified as being associated with participation in in agri-food value chains GAVCs is that of market concentration which, as noted by Swinnen et al. (2015), can create or accentuate economy-wide and social challenges. This is partly due to the market power relations which often exists between lead firms and other actors is asymmetric (Barrett et al., 2023). Many lead firms, which anchor GAVCs, are multinational companies or very large-scale enterprises with considerable market power, especially when they engage smallholder farmers in contract farming. Apart from equity issues in such relationships, there are also concerns about the exclusion of smallholder farmers as medium and larger-scale producers displace them in taking up contract farming opportunities.

18. On one hand, exclusion of smallholder farmers who dominate agricultural production in most African countries, denies them opportunities for commercialisation of their farming activities. Hence, they miss out on the benefits of commercialisation which Ogutu et al (2020) identify, including rising income and enhanced food and nutrition security in their households. On the hand, commercialisation and associated intensification of agriculture poses significant risks in terms of adverse environmental impacts including land degradation and acute water stress (Barrett et al. 2023).

19. By improving producer incentives non-staple-food value chains, participation in GAVCs can trigger the reallocation of productive resources from producing staple foods by farm households. The consequent domestic output and supply difficulties as well as rising food prices may increase the risk of food and nutrition insecurity, especially for vulnerable rural and urban households. This concern, however, appears to be assuaged by evidence reported by Dalheimer et al. (2023). Using longitudinal data from over 135 countries for the period 2000 to 2015, their study finds that participation in GAVCs resulted in a decrease in consumer food prices at the country level though price volatility appears to have increased. This apparent trade-off is more pronounced among low-income countries, especially sub-Saharan African countries. They attribute this to lack of diversification of suppliers, especially as they also found levels of volatility to be associated more with downstream participation in GAVCs than with upstream participation.

20. Ogutu et al. (2020) add further evidence showing that, as a result of its positive household income effects, agricultural commercialisation significantly improves food and nutrition security. This is partly because the rise in income allows producer households to acquire purchased foods with improved dietary quality in terms of essential vitamins and micronutrients. Furthermore, they did not find any evidence to suggest that these households consumed less nutrients from their own-produced foods.

21. Enhancing market access has been identified as a critical factor in the development of GAVCs. Ogutu et al. (2020) add its importance not only for rural economic growth but also makes smallholder farming more nutrition-sensitive. However, several barriers to agricultural trade exist not only at subregional cross-border trade level but also in domestic food trade in Africa. For instance, in the formal segments of agricultural markets quality standards often bar small-scale traders and smallholder farmers from access. This is despite the fact that these market segments are more remunerative. They include markets for agricultural raw materials for industrial processing, including grain milling in many Eastern and Southern African (ESA) countries. The supermarket chains and restaurants cater to a growing population of middle-class consumers who demand high-quality food products. The quality standards adopted in response often constitute insurmountable hurdles for small-scale producers and traders.

22. At the subregional level, non-tariff barriers and unpredictable trade policies (e.g. ad hoc restrictions on food exports) hamper stable development of trade as well as GAVCs which can be beneficial to producers and consumers on different sides of national borders. Decades of efforts to harmonise commodity standards and ease physical clearing of agricultural goods at borders have achieved limited impacts as a result of the policy-related and non-tariff barriers. Policy actions to manage food supply shortfalls and protection of domestic infant industries usually drive these government actions which tend to hinder the development of GAVCs. As argued with supporting evidence by Grenville et al. (2017) these factors raise the cost of doing business, reduce industry competitiveness and, therefore, ability to participate in GAVCs. In addition, they dampen growth in domestic value added.

23. Inflow of private investment as well as finance are seen as critical to growth in GAVCs and the overall performance of agricultural sectors. It is for this reason that African governments committed to specific targets under the AU's Malabo Declaration (of 2014) in terms of growth in private investment and supply of finance to actors in agricultural value chains. Recent review however show that most African countries are nowhere close to achieving those targets. The policy risks mentioned above stymie investment and flow of finance to actors in the sector.

24. Even more debilitating is the prevalence of a wide range of risks in agriculture. These include, at pre-harvest, weather risks such as drought, flooding and erratic rainfall as well as other natural risks, e.g. pest and disease outbreaks (Onumah et al. 2016). In addition, limited access to physical infrastructure and equipment for storage and processing make postharvest handling of commodities very challenges and lead to very high loss levels which impact negatively on farm profitability as well as food availability. Furthermore, inefficiencies in agricultural markets expose producers and consumers in most African countries to high levels of volatility in commodity prices. Managing price volatility is a major challenge for most actors, especially because of limited supply of hedging instruments. In South Africa, however, market actors (e.g. producers, traders, processors and financiers) can use derivatives traded through Agricultural Division of the Johannesburg Stock Exchange[36] to manage price risk.

e) Addressing risks and challenges hampering development of GAVCs

25. Namibia maintains a pretty open agricultural economy. The country has successfully exploited its natural endowments to make its export livestock and fisheries products its most important foreign exchange earner. In particular, the export of live animals, mostly cattle and sheep, accounts for about two-thirds of agricultural exports by value. The bulk of these exports goes into markets in the US, Europe, South Africa, and China.

26. Namibia is also a net importer of food products including grains for human consumption and for feed. The country also imports significant volumes of poultry, pork and dairy products as well as vegetables. South Africa is the main source of food and agricultural imports. Other major sources include the Netherlands, Germany, Russia and Morocco. The dependence on food imports is due largely to the country's dry climate. However, government tries to support local producers through, for instance, encouraging domestic retailers of fruits, vegetables and other crop products to ensure that 27.5 percent of their stock is sourced from local farmers.

Case 1: Zambia eggs value chain: blended finance spurs growth

28. Zambia's table eggs value chain makes a significant contribution to the country's agricultural GDP, estimated in 2018 at about 13.5 percent (Onumah et al. (2018). This contribution, which does not include value added from broiler production, is almost double the contribution of fisheries and aquaculture. The value chain also generates foreign exchange exports into the subregional markets including the Democratic Republic of Congo and Angola. The foreign exchange inflows from this chain exceed what is generated by other more recognised non-traditional agricultural export products from Zambia, e.g. horticultural products.

29. The eggs value chain also relies on imported inputs such as day-old chicks (to complete domestic production) and veterinary products from global suppliers as well as some feed ingredients, mainly from subregional sources. Though the main feed grains (e.g. maize and soya) are sourced from domestic producers, producers tend to import from subregional suppliers to fill domestic shortfalls which are often attributable to weather conditions, especially drought.

30. Access to finance has been a significant constraint to efforts by producers to scale up output in order to meet growing demand from domestic and subregional consumers. To address this challenge, one of the leading egg producers in Zambia secured blended finance from different sources. The financing package consisted of equity investment, grant-funded Technical Assistance Facility (TAF) and use of internally generated resources to construct distribution outlets in a strategic border town.

31. The equity investment was provided by the African Agriculture Fund (AAF), which is an impact investor that is known for its investments in food value chains across Africa. The purpose was to enable the company to expand its production facilities, resulting in its production capacity being more than doubled. Consequently, the company became very dominant in the market, accounting for about 20 percent of Zambia's table eggs production capacity. The TAF, which directly complemented the equity investment focused specifically developing a bottom-of-the-pyramid (BOP) distribution system to facilitate deliveries of eggs to urban poor consumers.

[34] The Agricultural Division used to be the South Africa Futures Exchange or SAFEX until it was absorbed by the JSE.

32. Other large-scale egg producers in the country responded to this investment by also scaling up output, leading to a substantial rise in market share that they controlled and decline in the share attributable to medium and small-scale producers falling to only 6.0 percent. This raised concerns about inclusiveness in the value chain. Evidence from a study by Onumah et al. (2018) validated this concern, when inclusiveness is perceived in terms of output from different types of producers. However, evidence from that study revealed major beneficial shifts in the consumption and distribution of eggs in the country.

33. For instance, as a result of increased competition among large-scale producers, the retail price of table eggs was not only stabilised but fell in real terms relative to other animal protein sources. Consequently, there emerged a substantial increase in per capita consumption of eggs by consumers in relatively poor, high-density urban communities. This impacted positively on food and nutrition security in those urban poor households. The retail and distribution system also had to change in order to reach the consumers in these communities. The supermarkets were no longer fit-for-purpose in reaching them. The development of the BOP distribution system made it possible to respond effectively to this shift. In addition, participation by informal wholesalers and a huge number of small and micro retailers increased the level on inclusiveness at the retail and distribution segment of the eggs value chain in Zambia. In particular, women dominated community level micro retailing.

Case 2: Ghana sorghum value chain: integrating smallholders into a globalised chain

34. From the mid-2010s, the brewery industry in Ghana witnessed a change which resulted in the transformation of the sorghum value chain in the country. It was an initiative which involved creating an opportunity for local smallholder producers to supply sorghum grains for brewing in place of imported malted barley. It involved the market leader in the formal brewing industry (a subsidiary of a multinational company) and represented its response to a government policy which aimed at promoting increase in the share of locally-sourced raw materials used by manufacturers and processors.

35. Uptake of sorghum followed years of research by a public institution in collaboration with the brewery. That research was part-funded by a donor project. It went along with research involving identification of suitable sorghum varieties and investment in ensuring supply to the smallholder producers. Following that, the brewery collaborated with private companies to develop a supply chain that relied on medium-scale aggregators and a network of organised smallholders. The participating smallholders were assisted to secure farm inputs with pre-finance provided by the aggregators. Informal contracts protected the interests of participating actors and were enforced by means of peer pressure and monitoring by "lead farmers" selected by the aggregators. The brewery mediated these contracts by guaranteeing collectively negotiated producer prices before the harvest season.

36. A study by Onumah et al. (2020) reports that, as a result of the initiative, the brewery was utilising about 8.0% of total national sorghum grain production by the end of 2018. Despite the relatively low level of grain uptake, the impact of the initiative was quite significant. For instance, the participating smallholders saw their annual income from sorghum grain production rise from US$145 to about US$320. This means the possibility of escaping poverty as the national poverty line at the time was estimated at US$275. The income rise for smallholders was attributable in part to improved access to yield-enhancing inputs and to their ability to sell into a more remunerative formal market. In addition, selling to aggregators soon after harvest meant they stored less at home and therefore experienced significantly lower postharvest losses, especially they were also supplied with tarpaulins to aid drying after harvest. The pan-seasonal pricing formula used by the brewery meant that they suffered no income loss as a result of selling soon after harvest.

37. The sorghum value chain in 2018 generated a total value added representing almost 2 percent of Ghana's agricultural GDP. Over 40 percent of this originated from sorghum processors, especially by the brewery. The logistics services providers in the value chain was also significant as the direct contribution of farmers to value added in the chain was only about 18 percent. The initiative saved the country about US$7.5 million in foreign exchange which would otherwise have gone into importing barley. The contribution by the value chain to public finances also increased substantially as the brewery about 65% of the total taxes and levies paid by actors in the chain. This is because, prior to the initiative, transactions in the chain were largely informal and therefore tax collection is extremely difficult. Farmers in general are excluded from paying income taxes though they are often required to pay local government levies.

Case 3: Uganda maize value chain: open trade eases supply of quality grains

38. As was the case in the Ghana sorghum value chain (Case 2) above, the brewery industry has been involved in using maize grits in brewing local beer. The main challenge the industry faces is how to access quality maize grain in the country. This is a rather surprising constraint, considering that Uganda is one of the few countries in Eastern Africa which usually produces a surplus of maize grain because of its favourable agroclimate – it has two rainy seasons and land across most parts of the country are suitable for production of grains. Uganda is therefore a major exporter of maize grain to Kenya, which is largely a net importer of the crop. Tanzania is the other major exporter of maize to Kenya, but supplies tend to be disrupted when it imposes export bans whenever they have a short crop.

39. The Uganda maize grain market is predominantly informal and lack enforcement of quality standards. As a result, and as reported by Onumah and Nakajjo (2014), maize grains from the country are generally perceived as being sub-grade and comparatively lower cost. Kenyan grain traders therefore import this maize and blend with higher-priced quality grains which is either produced locally or imported from Tanzania and supply to their milling industry. The breweries in Uganda are averse to using local grains because of this quality problem and tend to rely on Kenya traders re-exporting blended maize grains to them. It is a procurement strategy which is critical to their operations and will remain so until the country institutes a robustly enforced quality assurance system in the grains subsectors. It has so far worked because government imposes no restrictions on grain trade between Uganda and parties in the subregion.

40. The type of free trade in commodities which allows net exporters to simultaneously allow imports, applies in the case mango value chain in the Dominican Republic. The country is a major exporter of premium mango fruits. However, as part of efforts to produce and export processed mango products (juice and concentrates) the government allowed importation of non-premium mango fruits from subregional suppliers (Onumah et al. 2023). This allowed for blending which deemed by industry players as critical in enhancing competitiveness in exporting processed mango products. Ghana is following a similar pathway as part of the strategy to scale up export of processed cocoa products. Though the country has a long-standing reputation for exporting premium cocoa beans, it is allowing local processing companies to import non-premium beans from other West African producers.

f) Concluding remarks

41. The discussions in this paper have shown that African agricultural economies can benefit from participation in GAVCs. Taking advantage of GAVCs may imply transitioning from exporting raw agricultural commodities, as has historically been the case, into becoming actively engaged in the transformation of such produce at different nodes in the target value chains. The three cases, which are briefly reviewed in the paper, show that beyond financial gains by private investors there can be economy-wide benefits and positive social impacts. These include growth in value added in the particular value chains as well as increase in contribution to net foreign exchange generation and public finances.

In the Ghana sorghum case, it is interesting to note that integrating smallholders into a GAVC increased household income to the point where they could escape poverty. In the Zambia case (eggs value chain), there was a significant positive impact on household food and nutrition security following upscaling of the operating capacity of a lead enterprise involved in a value chain that is integrated into the subregional food economy.

42. It is also apparent from the reviewed cases that private investment is the key catalyst for the development and upscaling of GAVCs. The lead actors are diverse and include foreign as well as local investors who aim to optimise their competitiveness in the selected value chains. However, it is also apparent that policy support can be crucial in addressing identified risks and challenges which hinder investment and growth in the value chains. For instance, in the case of Ghana's sorghum value chain, public research on the technical efficacy of using sorghum grain in brewing alcoholic and non-alcoholic beverages was critical in the investment strategy pursued by the lead enterprise. Equally important was public research in identifying and multiplying suitable sorghum varieties for cultivation by participating farmers. Quite clearly, the lead firm was keen to benefit from tax and other incentives offered by government to companies that increase the local content of the raw materials they use.

43. In the case of Zambia (eggs value chain), access to blended finance (e.g. impact investment coupled with grant-funded technical assistance funding) proved pivotal in transforming the chain. Breweries in Uganda could not have used maize grain to any scale if they had relied exclusively on local sources. This was largely due to produce quality challenges which was overcome when Kenyan traders imported substandard grains from Uganda, blended with higher quality grains in their market. The blended produce was then re-exported to industrial users in Uganda and was only possible because the government maintained an open trade policy, even for produce for which it has significant comparative advantage.

44. One challenge that is sharply illustrated in the Zambia case is where policymakers need to draw a line between financial gains by investors and broader objectives such as enhancing inclusiveness in target value chains. Specific support provided to the lead firm resulted in market dominance by large-scale producers. However, by lowering the price of table eggs and driving up consumption by relatively poor urban households, a distribution system emerged with greater participation by small/micro-scale retailers. Furthermore, there is evidence showing that the development had positive impacts on food and nutrition security in relatively poor urban households.

45. This case shows that assessment of interventions in GAVCs goes beyond analysing private incentives to invest but also includes considering complex, multi-faceted issues including broader economic implications as well as social and other impacts. This implies the need for evidence-based engagement between private actors and policymakers with regards to decisions affecting the development of GAVCs. Establishing the financial viability of participation may be a critical consideration for the private sector but for the public sector and donors intending to promote such developments, broader economic, social and environmental implications need to be taken into account. Such studies to generate evidence for such decisions should also go beyond national boundaries because of the involvement of subregional, continental and global actors.

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06

Policy issues emanating from the 25th Bank of Namibia Annual Symposium by Bank of Namibia Research and Financial Sector Development Department

06

Policy issues emanating from the 25th Bank of Namibia Annual Symposium by Bank of Namibia Research and Financial Sector Development Department

I. Introduction and background

1. This paper aims to assess the status of Namibia's 1. On 19 September 2024, the Bank of Namibia held its 25th annual symposium at the Mercure Hotel, in Windhoek under the theme:

Agricultural Global Value Chains for Inclusive Development: How can Namibia position its agriculture sector?

The theme focused on probable interventions the country could undertake to increase global participation in the agricultural sector in an effort to enhance sustainable economic development. The theme, therefore, examined the challenges faced by Namibia's agriculture industry and reviewed potential options to increase global participation - and by extension, intergrate Namibia into existing agricultural global value chains (AGVCs).

2. AGVCs have changed the nature of production and specialisation around the world. Simply defined, global value chains represent activities spread over several countries that take place while transforming raw materials into end-use products. While changes in the international production landscape have been most pronounced in manufacturing and services, similar changes have also occurred in the agricultural and food (agri-food) sector, as reflected in the rising trade in both intermediate and final goods.

3. AGVCs connect producers to consumers across the world. Trade in agricultural and food products has changed over time, with the food we eat and the clothing we wear increasingly being delivered by global production systems that cross many borders. Thus, AGVCs not only connect producers of food and fibre to consumers worldwide, but they also help ensure the delivery of food and textiles supplies remain stable. This provides greater choice to consumers, while generating incomes for producers. To put this in context, on average of around 21 percent of the value of exported agrifood products from any given country in 2014 came from goods and services produced in other countries[1]

4. Agricultural businesses in developing countries such as Namibia offer an opportunity for market-based economic development that creates benefits throughout AGVCs. About 75 percent of the world's poor live in rural areas and depend on farming, livestock, aquaculture and other agricultural products as their primary source of income.[2] Given the World Bank's estimate that economic growth in the agricultural sector is twice as effective in reducing poverty as growth in other sectors of the economy, strengthening AGVCs is among the most effective ways to address global inequality and poverty.

5. For agriculture and food sectors, participation in agrifood value chains helps enhance overall sector growth – improving the returns to farmers and food producers along the value chain. In particular, making use of more affordable inputs from other countries to produce agrifood products, and having access to foreign consumers through value chains have helped to grow agrifood sectors and increase the share of gains flowing to farmers and producers. Vos and Cattaneo (2021), for example, empasise the importance of having resilient and inclusive food systems and facilitating better functioning and interconnectedness small and medium sized enterprises that are proliferating the "hidden middle" of the food value chains in storage, logistics transportation and wholesale and retail distribution. The authors also stress the importance of policies that can help smallholder farmers connect to this "hidden middle" in more gainful ways and help eradicate poverty.

6. Against this background, governments and producers are increasingly interested in finding pathways to position their agricultural and food sectors to leverage opportunities provided by AGVCs. The manner in which producers in different sectors participate in value chains is heavily influenced by the nature of the products they offer. For instance, with highly perishable products such as fresh vegetables are likely to go relatively directly from producer to consumer through AGVCs, compared to long-lasting items such as oilseeds, wheat and many fibres such as wool and cotton, which feed into food and clothing manufacturing processes and which can cross borders multiple times before reaching the end user.

7. The Symposium was organised against this backdrop, with a view to advancing greater global agricultural integration. More specifically, the deliberations were guided by the following key questions, among others:

- What measures are needed to increase agricultural productivity and facilitate a thriving agricultural industry in Namibia?
- What are the key impediments to transforming the agricultural sector, including how to scale up technologies t to boost wider benefits across the entire agri-food chain all the way to the consumer?
- Which are the major constraints for value chain upgrading, e.g. market access restrictions, weak infrastructures, lacking resources and institutional voids
- What can the Government do to devise clear implementable plans to support physical infrastructure development and achieve a smoother flow of products through the value chain (better roads infrastructure and distribution facilities such as storage and better communication infrastructures)?
- How best should policymakers and producers sustainably address the reality of the fluctuating rain patterns owing to ever-increasing temperatures in the country caused by climate change which affects agricultural production?
- Define the upgrading options related to value addition.
- Identify the most suitable partnerships for upgrading the agriculture value chain in Namibia.
- How do we expand entrepreneurship opportunities for increased skills in the rural areas for agro-industry development?
- And finally, and more importantly, how can?

8. These and other issues were addressed through presentations delivered during the Symposium by local and international speakers and further supplemented by a panel discussion. Notable speakers comprised of representatives from the public, private and International Organizations, specifically from the Natural Resource Institute at the University of Greenwich (United Kingdom); the Food and Agriculture Organisation of the United Nations; the Ministry of Industrialisation and Trade; the Ministry of Agriculture, Water and Land Reform; Ombu Capital Namibia; the Southern African Development Community (SADC) Secretariat; and the Bank of Namibia.

9. Following the introduction and background, Section 2 provides a summary of the substantive policy issues raised during the symposium while section 3 underscores the general policy recommendations. Section 4 looks at specific policy recommendations proposed. A major conclusion that emanated from the 25th Annual Symposium was that the agriculture sector plays a major role in national food security and needs proper planning and infrastructure for the sector to grow and thrive.

2. Key policy issues emanating from the symposium

10. A number of policy issues within the agriculture sector were highlighted from the papers and discussions at the symposium. The following is a summary of the key issues that emerged from the Symposium, divided into two sub-themes:

A. Challenges affecting productivity in the agricultural sector

i) High cost of water and electricity

11. The cost of manufacturing in Namibia is higher when compared to neighbouring countries due to the prevailing high input costs of water and electricity. The agro-processing industry continues to express discontent about high water and electricity costs in the country. Given their operational setup, abattoirs utilise significant amounts of water and electricity and, therefore, tend to have higher tariffs when compared to most businesses. In addition to this, abattoirs are charged an extra levy on dirty water. The associated exorbitant energy and water costs are two key challenges for reaching full production capacities and profitability. Additionally, companies such as millers are charged a demand charge of approximately N$150 000 for simply switching on the water pumps, which is above and beyond associated cost of actual electricity consumption.

ii) Poor-quality storage facilities, high transportation costs and a lack of skills

12. Along the agro processing supply chain, other challenges exist, including poor-quality storage facilities, high transportation costs, lack of skills and information asymmetries. Key issues pertaining to the agro processing relates to complexities faced such as lack of appropriate storage facilities and inadequate skills in agriculture management. Moreover, some sector players especially in rural areas have less information about prevalent consumer price. Other challenges also relate to the lack of consistency in supply and demand for agricultural produce, mainly owed to changing weather patterns.

iii) Unavailability of inputs such as seeds and fertilizers within the local market

13. There is a lack of agricultural inputs (i.e. seeds, fertilisers, etc.) within the local market, with a significant portion of inputs mainly sourced from abroad. According to data obtained from the NSA, Namibia imported an average of N$12.8 million seeds between 2010 and 2023. It imported N$776.8 million and N$606.1million worth of feed and fertilizers, respectively in the same period. Overall, fertilizer prices saw huge increases from 2020 to 2022 due to the Covid-19 pandemic and further surged following supply disruptions as a result of the Russia-Ukraine conflict. A sharp increase in prices of fertilizer was also recorded in 2023 owing to global production shortfalls for urea and ammonia.

iv) Traditional farming methods still popular in Namibia, despite devastating effects of climate change

14. The agricultural sector is vulnerable to climate change as the country is yet to adapt new methods in view of changing weather. The use of traditional methods, particularly the heavy reliance on rainfed agricultural practices are still prevalent in Namibia despite recuring droughts and climate change affecting crops. Furthermore, the poor quality and lack of fertilisers along with limited access to feed for livestock has exacerbated the situation.

v) Low financial inclusion in rural areas.

15. Access to finance in Namibia remains a barrier to development. Lack of access to financial services, whether through the sparsity of financial service providers, shallow financial markets or the problems with land tenure and hence collateral, is a major bottleneck in rural Namibia (Namibia Financial Sector Strategy 2011-2021). Despite significant improvement at the national level, financial inclusion remains low in rural areas. About 27 percent of the rural population eligible for financial services remain financially excluded.

vi) Regulatory uncertainties and delays in implementation of regulations and bills

16. The delays in implementation of regulations and bills makes attracting investors into the country difficult. The absence of regulatory frameworks and lengthy approval process for pending bills hinder Namibia's investor attraction. Approximately 70 bills are awaiting approval, causing uncertainty for businesses. Some of the outstanding bills that have been seen as unfriendly for investment, include the Investment Promotion and Facilitation Bill, National Equitable Economic Empowerment Bill, and International Trade Management Bill. Additionally, critical regulations encompass the Special Economic Zones Bill, the Consumer Protection Bill, the Food Safety Bill, and legislation about land and procurement. Timely cancelation of unpassed draft bills is crucial for investment and economic growth. Revoking former tax incentives for local manufacturing without suitable alternatives has negatively affected investment decisions and the economy.

B. Challenges affecting trading in agricultural products

vii) Lack of access to domestic and international markets

17. Access to domestic and international markets for smallholder and/or communal farmers remains a major bottleneck due to a lack of market infrastructure, including abattoirs. In many cases, smallholder farmers are forced to sell their products at low prices or in extreme cases having to donate because they cannot find buyers. This situation discourages small farmers from producing more than what they need for own consumption.

18. A large number of beef cattle are slaughtered outside the formal abattoir sector; therefore, the hides produced do not form part of further beneficiation or value adding. The quality of hides produced from informal slaughtering appear to raise concern on quality issues. It seems that the raw hides being produced are not being processed to their maximum potential. The local training and education capacities regarding hides were also assessed as not adequate for enhancing training and skills development research and development, and efficient commercialisation of services.

viii) Strong competition from imported dairy products

19. The influx of cheaper dairy imports poses a significant risk to the Namibia dairy industry. Since 2004, the Namibian dairy industry has been on the verge of extinction due to the influx of cheaper dairy imports from South Africa. The cheaper products, despite larger economies of scale and cheaper inputs in South Africa, is also because milk products are zero rated in that country. An eight-year Infant Industry Protection (IIP) initiative was implemented to shield the industry, which expired in 2008. Despite the protective measures, the sector struggled to meet domestic demand even during the IIP period.

20. The dairy industry has an opportunity to penetrate markets of neighbouring African countries. The dairy industry has an opportunity to penetrate countries such as Angola especially since there is a high demand for cultured milk products (Omaere, Oshikandela and Oshitaka). However, the issue of uncertainty when it comes to payments from Angola poses a serious business risk for producers considering the need for cashflow.

ix) Poor marketing and packaging of locally produced products

21. Namibian agricultural products are poorly marketed and packaged for the local and international consumers. Notwithstanding the unique quality of Namibian beefand sustainable production practices, there is very limited marketing efforts undertaken to build brand loyalty. Namibian beef is known for being hormone-free and antibiotic-free, raised on natural rangelands. The industry's commitment to strict animal welfare and traceability standards is unwavering, contributing to its reputation for high-quality beef and sustainability. Despite challenges such as drought, land degradation, and high production costs, the industry is well-positioned to meet the global demand for high-quality beef, presenting opportunities for growth.

x) Poor agricultural infrastructure

22. There are inadequate infrastructure services in the agricultural sector in Namibia. Agriculture is an important part of development and poverty mitigation. It depends on infrastructure such as good roads, safe drinking water, adequate power supply, a market network, modern communication services and facilities for processing and storing farm harvests.

23. Issues with the Cape Town port has necessitated the need for grape and date farmers to switch to exporting through the Walvis Bay port. Walvis Bay is seen as a viable export hub, with potential for increased cargo from Namibian and South African growers. Shipping through Walvis Bay saves around four days of shipping compared to Cape Town, ensuring fresher fruit for customers. However, there are challenges, like the 508 km longer round trip for trucks from Aussenkehr to Walvis Bay compared to Cape Town. The distance from Aussenkehr to Walvis Bay is 911km while that from Aussenkehr to Cape Town is 734km. Nonetheless, it's predicted that the competitive logistical solution provided by Walvis Bay will surely attract more cargo from Capespan and others in the future. However, for a competitive advantage, this will require the construction of a shorter route through Maltahohe that will save approximately 300km of travel distance.

3. General policy recommendations

24. Key recommendations from the papers and discussions at the Symposium outlined the urgent need for the country to roll out a new curriculum for skills development, sustainable agriculture and income-generating activities. The following is a summary of the key policy issues that emerged from the Symposium, arranged according to three broad themes in line with the rural economy discourse namely Ease of doing business; Management, infrastructure and market access; and Infrastructure and skills development:

C. Ease of doing business

xi) Enhance water security by adopting climate smart agriculture to increase productivity

25. Efforts to build water infrastructure such as desalination plants for bulk water supply should be accelerated. Namibia faces issues of a lack of water along with high electricity costs. The country could therefore reap major benefits from coupling desalination with renewable energy sources, given its long shoreline and abundance of sun. Doing so could potentially ensure a sustainable water supply, energy security for the water sector, and environmental sustainability.

26. The country also needs to improve its agricultural resilience by installing irrigation systems. Improved irrigation systems and broader access to electricity and finance would support higher levels of employment, economic growth and poverty reduction during prolonged dry spells and water shortages. These factors work hand in hand: electricity powers irrigation systems and deep tube-well pumps, and access to finance facilitates the building and maintenance of all three. However, the country also needs to review its high electricity fees, such as demand charges

27. Furthermore, the government needs to find a solution to the issue of high electricity costs. The high demand fees levied against greens schemes need to be examined. Similarly, despite the lower prices of solar PVs, battery prices in Namibia remain high, and the energy generated cannot be stored and can only be used during the day, and at night or during cloudy days, the greens scheme are subsequently forced to revert to the grid. The Government should thus consider lowering the price of electricity to meet the private sector halfway.

xii) Revise levies for intermediate good

28. Raw materials imported into the country that are used as intermediate goods to produce finished goods should not be subjected to unnecessary levies. For example, the wheat used to produce pasta in Namibia is imported. The wheat is sourced from available global origins, but on entry to Namibia, it becomes 5 percent more expensive due to the 5 percent levy imposed by the Namibian Agronomic Board (NAB). If pasta is exported to the southern African market, it faces a disadvantage when competing with South African or other global pasta manufacturers, as pasta exports are indirectly taxed in Namibia. Although the NAB uses its levy revenue for research and agricultural growth domestically, it is making the millers worse off and killing the industrial process

xiii) Invest in the production of fertilizers in the domestic market to reduce input cost

29. Investment is required in fertiliser manufacturing in Namibia is required to reduce the burden of fertiliser costs and thereby reduce input costs. For example, local manufacturing of this agro-input could reduce prices as it would ease the burden of logistics costs. The country should also leverage and embrace the current hydrogen projects to increase domestic fertiliser production. An added advantage is that this would produce low-carbon-footprint fertilisers. Domestically produced green hydrogen and ammonia can also help reduce Namibia's dependence on imports for such inputs, enhance food security, and limit emissions from fertiliser manufacturing.

xiv) Provide income tax incentives and subsidies in order to grow Namibian products

30. Income tax incentives should be offered on the importation of agricultural raw materials intended for value addition. As mentioned earlier, the wheat used to produce pasta in Namibia is imported. The wheat is sourced from available global origins, but on entry to Namibia, it becomes 5 percent more expensive due to the 5 percent levy imposed by the NAB. If pasta is exported to the southern African market, it faces a disadvantage when competing with South African or other global pasta manufacturers, as pasta exports are indirectly taxed in Namibia. Although NAB uses its levy revenue for research and agricultural growth domestically, it is making the millers worse off and killing the industrial process.

31. Furthermore, subsidies for or zero taxes on all milk products could put Namibia's dairy industry on par with those in neighbouring countries. Namibia is currently at a disadvantage when competing with neighbouring countries' milk products as the latter's products are zero-rated across the board in those countries, while only fresh milk is zero-rated in Namibia. This means Namibia's dairy industry cannot compete with similar products from abroad.

xv) Finalise relevant outstanding bills and regulations to boost investor confidence and attract investment.

32. The Government should finalise long-outstanding bills and regulations to boost investor confidence. The challenges associated with the delay in implementing regulations or passing bills hinder the attraction of investors to the country. Bills that have been outstanding for several years should, therefore, be finalised promptly. Alternatively, Namibia should set a limit on the time for which a bill can be outstanding, after which the bill should be taken off Parliament's register.

D. Management, infrastructure and market access

xvi) Improving rural infrastructure and supporting small-scale farmers

33. The Government needs to invest in rural infrastructure to make it easier for farmers – especially small-scale and subsistence farmers in rural areas – to reach the markets. These farmers and other agricultural producers need such facilities to profitably sell their products to the domestic market and for potential buyers to have access to products that are in the market. Although Namibia has made great strides in ensuring that local farmers' produce meets the markets, more needs to be done – especially in improving infrastructure. Moreover, infrastructure development requires water supply and irrigation systems, farm-to-market roads, railways, airports, marketplaces, storage facilities, information and communication technologies, energy, and rural electrification.

xvii) Take advantage of existing markets to increase value chain and market access

34. The design and implementation of marketing strategies to enhance the brand identity of Namibian beef products and highlight their premium qualities at the retail shelf should be supported. Namibian beef's unique qualities and sustainable production practices should be publicised to build brand loyalty. Namibian beef is known for being hormone-free and antibiotic-free, and the cattle are raised on natural rangelands. The industry's commitment to strict animal welfare and traceability standards is unwavering, contributing to its reputation for high-quality beef and sustainability. These qualities should be used to market the beef and penetrate more markets.

35. The value chain and market access should be enhanced by taking advantage of the existing market continentally and globally. As a small economy with a limited domestic market, Namibia has an array of trading arrangements underpinned by a commitment to trade openness and integration into regional and global markets. The country is also a member of the African Continental Free Trade Area (AfCFTA) Agreement, the Southern African Customs Union (SACU) and the Southern African Development Community (SADC), besides having duty-free access to markets in the United States until 2025 via that country's African Growth and Opportunity Act.

36. Furthermore, strengthening its logistics hub can enhance Namibia's position in the AGVC. Namibia is a key beef-exporter within SADC, whereas several countries in the region import meat from South America-particularly Chile and Argentina.

37. The ongoing work to further integrate Namibia and Angola's national payment systems into SADC's regional cross-border real-time gross settlement (RTGS) system as part of efforts to facilitate and expedite trade both among and between SADC members. This should be complemented with the speedy elimination of other non-tariff barriers as well as investment and improvement in both soft and physical infrastructures to facilitate trade. By doing so, trade between Namibia and Angola in particular could be strengthened. In addition, as part of the AfCFTA Agreement, Namibia should leverage the Inclusive Instant Payments Systems in Africa launched by the African Union[1] to boost trade within the continent.

E. Increase agricultural productivity

xviii) Focus on viable strategies to increase agricultural output and value addition

38. The production of grains (millet and sorghum) should be increased as they have recently been internationally recognised as superfoods. Cereal grains serve as a crucial food source and hold substantial importance in human diets. Therefore, increasing the production of these foods becomes crucial for achieving food and nutritional security. Leveraging these grains holds the potential to significantly alleviate the challenges of food insecurity and malnutrition. Furthermore, millet is a drought-resistant grain, constituting a primary source of carbohydrates and proteins.

39. Smallholder and subsistence farmers should be encouraged to use high-yield technologies. The accelerated application of smart, digital and precision agricultural technologies offers a historic opportunity to improve agricultural productivity for such farmers in developing countries and to generate the rural transformation. Use of these technologies also helps address the information asymmetries and deficiencies that small-scale farmers in particular face.

40. Namibia needs to vary the forms of the products the country it produces, especially where it already has a competitive advantage. For example, Namibia currently grows fresh produce meant for raw consumption, such as onions, tomatoes and table grapes. Since the country is already integrated into the global market in these products, it can add different seed varieties of the same products, such as diversifying into grapes for wine or tomatoes for tomato paste or sauce.

41. Another recommendation is to create a more resilient and sustainable agricultural system by applying the principles of circular agriculture to increase feed production. Fodder costs remain high, and the import bill increases significantly during drought years. Using a circular agricultural farming practice will reduce such imports and lower costs. Practices such as crop rotation, composting and integrated pest management are examples of circular agriculture methods that enhance soil health, reduce chemical inputs and promote biodiversity.[2] This is also a way of increasing feedlots in the country, as was done on the Musese Green Scheme. Cattle at Musese are put out to graze on harvested sections of the farms. This not only feeds the animals, but also increases ground fertility.

xix) Explore sustainable financing products for SMEs and small-holder farmers

42. An Agricultural Fund should be established with a specific focus on water infrastructure development. Planning such investments for agriculture needs to factor in the uncertainty associated with climate change. To this end, investments be flexible and capable across a wide range of wet and dry conditions.

43. More support should be provided to farmers via financial literacy programmes for them to access finance. While not a means to an end, access to financial services is critical in providing funds for farm investments in productivity and to improve post-harvest practices, smooth household cash flow, enable better access to markets and promote better management of risks. Access to finance can also play an important role in climate adaptation and can increase the resilience of agriculture to climate change, thus contributing to longer-term food security. Access to a comprehensive range of financial services is a significant challenge for smallholder and subsistence farmers, who constitute the vast majority of agriculturalists in Namibia. Namibia should therefore find innovative ways to increase loan product offerings to finance especially this majority group.

F. Infrastructure and skills development

xx) Improve rural infrastructure and support small scale farmers

44. Established infrastructure should be used to increase agricultural productivity. Thus, Namibia needs to make efficient and effective use of existing opportunities and infrastructure such as the vast Neckartal Dam and Government Green Scheme programmes. This should solve the water issues that the country faces and would increase food productivity.

xxi) Invest in cold storage and refrigerated transportation systems

45. Cold storage facilities and refrigerated transportation systems for perishable foods are crucial for minimising post-harvest losses. However, since losses occur at every step in the post-harvest cycle, such storage and transportation cannot be considered as the only solution to post-harvest spoilage. Nonetheless, this component certainly needs to be integrated into a cold-chain network from the point of harvest to the point of purchase by the end consumer

xxii) Provide training and technical support to rural farmers

46. Namibia should, together with key agricultural players, invest in capacity-building programmes focused on farmers and other interested parties in the agro-processing of fruits and vegetables. The main actors in this sector should be represented at NAB platforms, for the smooth facilitation, control and development of the sector. Moreover, agro-processing should be incorporated into the five-year Crop Value Chain Strategy being developed by the NAB as a separate chapter, providing targeted interventions that will stimulate agro-processing in Namibia.

47. Practical training programmes should be created for semi-skilled workers. By prioritising skills development, the agricultural sector would be able to build a more skilled, innovative and adaptable workforce. This, in turn, would lead to increased productivity, improved food security, and sustainable growth for the entire industry. Indeed, skills development is the cornerstone of a thriving agricultural sector. The Government could, therefore, consider hiring skilled, retired farmers from neighbouring countries such as Zimbabwe to improve Namibia's agriculture sector.

48. Strategies and training programmes that boost the youth's interest in agriculture should be developed as well. Another intervention that could offer a permanent solution to the persistent skills gap is to introduce practical agriculture as a required subject in public schools from elementary level. Furthermore, the National Youth Council should include courses on agriculture to support upskilling in the sector.

4. Specific policy recomendations

49. The recommendations below are subdivided into those that affect short- to medium-term policies on the one hand, and long-term policies on the other.

Short-term to medium-term policies:

Improve data statistics on rural economic activity:

- **The NSA, in coordination with the Ministry of Urban and Rural Development, needs to provide quality statistics on rural economic activity to inform policy decisions.** A lack of reliable and timely data hampers rural development. There is a need to improve the quality of the data collected through the improvement of methodologies and systems for data collection, processing and dissemination. Therefore, the NSA needs to develop and maintain a more comprehensive database of statistics on the national rural economy.

Drive agricultural productivity by utilising established infrastructure:

- The Ministry of Agriculture, Water and Land Reform should initiate the drive to use the Neckartal Dam to increase agricultural productivity.

Besides being an adequate resource for expanding irrigation schemes in southern Namibia, this body of water could benefit other projects too. Some examples are the following:

- Irrigation Green Schemes: Besides lucerne and fodder, these Green Schemes could include cash and high-value crops depending on the outcomes of the soil tests and feasibility studies;
- Hydroponic green feed and fodder projects as well as small stock feedlots, and;
- Freshwater fishing: Recent assessments by the Ministry of Fisheries and Marine Resources have shown that the Neckartal dam is home to various fish species.

Reduce the cost of industries that create value addition to products:

- The Ministry of Finance and Public Enterprises should provide income tax incentives with respect to the importation of agricultural raw materials intended for value addition. Thus, enterprises that add value to products should be given tax incentives to grow Namibia's agricultural industries.
- **In addition, the Ministry of Mines and Energy should review the demand charges levied against green schemes.** A demand charge of approximately N$150 000 is levied on millers – simply for switching on the water pumps. This charge adds to the costs of actual electricity consumption. The ministry therefore needs to find a way of reducing this cost to safeguard food security.

Draft skills development policies:

- **The Ministry of Education, Arts and Culture, in collaboration with the Ministry of Agriculture, Water and Land Reform and the Ministry of Urban and Rural Development should narrow skills gaps in the food economy by providing adequate training.** The youth should be taught practical holistic food system education (ecology, food safety, food processing, marketing, use of digital technologies, etc.) from an elementary level.
- **Provide training in agro-ecological and climate-smart agriculture practices.** Climate-smart agriculture is a comprehensive strategy for managing farmlands, crops, livestock, and forests in a way that counteracts the negative impacts of climate change on agricultural productivity. By enhancing crop and livestock production as well as farm profitability, climate-smart agriculture works to raise overall agricultural productivity and provide greater food security.
- **The rural youth should be reskilled so that they can be integrated into downstream agricultural activities.** Small-scale farmers and young people in rural areas with low levels of skills have trouble integrating into local and global agricultural value chains, making it difficult for them to move up the ladder to meet the quantity and quality standards required for both national and export markets. Thus, vocational training should be tailored to suit rural settings and should promote employment in downstream agricultural activities as well as how to access markets. This reskilling should be done by the Ministry of Higher Education, Technology and Innovation in conjunction with the Ministry of Rural and Urban Development.

Draft policies to improve the quality of agricultural food:

- **The Ministry of Agriculture, Water and Land Reform, in coordination with the Ministry of Urban and Rural Development, should support markets for premium and local agri-food products through standards and regulatory mechanisms.** There is also a need to support the development of premium organic products (organic and other certified products) that could fetch higher prices in both global and domestic markets. This could be achieved through the adoption of a common regional organic standard, for example.
- **Consumers should be made more aware of local and organic products.** The organic fruits and vegetables market is driven primarily by consumers making a significant shift to organic products. Increasing awareness about the health benefits of such specialised produce is expected to drive the demand over the forecast period. Additionally, Government support for organic farming is expected to have a positive influence on the market by improving supply and product quality. Nonetheless, the lack of consumer awareness of organic products and the high costs involved in producing them hinder the growth of this part of the market. Therefore, the Ministry of Agriculture, Water and Land Reform, in coordination with the Ministry of Urban and Rural Development, should raise consumer awareness of local and organic products.
- **There is also a need for the effective development and beneficiation of land reform policies as well as for establishing agri-villages to enhance local economic development.** The Ministry of Agriculture, Water and Land Reform, in collaboration with the Ministry of Rural and Urban Development should therefore ensure that there is sufficient land available to develop agricultural produce.

Long-term policies:

Develop infrastructure development policies:

- **The Ministry of Works and Transport, together with the Ministry of Agriculture, Water and Land Reform should improve rural infrastructure and transportation networks.** These Ministries should develop comprehensive strategies to improve infrastructure such as roads, bridges, and water supply and power distribution systems. In addition, they should not only devise strategies to enhance transportation networks, but also consider the best types of infrastructure to facilitate transporting agricultural goods.
- **The Ministry of Works and Transport should improve access to markets by constructing a shorter route from southern Namibia to Walvis Bay through Maltahöhe.** This will provide companies in southern Namibia with easy market access to the Port of Walvis Bay instead of using the Port of Cape Town in South Africa.

07

Concluding remarks and vote of thanks

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Concluding remarks and vote of thanks

– Ms Leonie Dunn, Deputy Governor of the Bank of Namibia

Director of Ceremonies, Ladies and Gentlemen, standing on the already established protocol guiding our event today, I greet you a warm good afternoon!

1. It has been a great pleasure for the Bank of Namibia to host you at the 25th anniversary of our Annual Symposium, under a critical important national theme, very dear to the hearts of our Government and Namibians.

2. As highlighted earlier by Governors, past and present, our annual symposium seeks to dissect pertinent development and economic issues that impact national economic performance and proposing solutions on how to overcome same.

3. Today's deliberations and interactions indeed dissected in thought-provoking manner, depicting the core relevance and importance of the Symposium. We remain hopeful that the outcome of the Symposium will further deepen and stimulate our agricultural understanding, thinking and collective action to ensure the sector's productive contribution to Namibia's overall economic growth and development.

4. As a Central Bank, we remain steadfast in our commitment to continuously raise issues surrounding the economic development of Namibia and will continue to collaborate as we seek solutions to overcome our developmental challenges.

Director of Ceremonies, ladies, and gentlemen!

5. Expectations for today centred around identifying constraints and enabling viable solutions for agro value chain upgrading and finding the most appropriate partnerships to enhance the agricultural value chain in Namibia.

6. The Symposium indeed delivered on these expectations as we identified strategies for the enhancement of the agro-processing industry in the country, from as-is to what-can-be. We learned on how we can scale up investment in the agriculture sector to enable transition from exporting of raw materials with low share value, to Shipping finished products into subregional and continental markets with a higher share value.

7. We explored methods for boosting agro productivity to elevate income generation through agricultural value chains, which in turn foster employment opportunities, address poverty and inequality as well as contribute to Namibia's overall economic growth and development.

8. We also identified strategies to make agriculture appealing to Namibians, especially our youth and equipping them with agro-fit-for-future skills.

9. Lastly, we honed understanding that it is crucial to formulate clear and actionable plans covering the entire agro value chain, to support the efficiency of the value chain and the agricultural output. This includes but are not limited to investment in infrastructure, ensuring improvement in climate and disease resilient as well as modern and sustainable agro practices, enlarging transportation networks, distribution facilities, water facilitation (both rain and non-rainfed), Skills Development, Access to Finance (enabled by both public and private sector), Ensuring Enhanced IT infrastructure, Affordable and Available Utilities and Leveraging Technology and Namibia's Geographical Location, as well ensuring a balanced ratio exists between the price of the farmer and that of market, but to mention a few.

10. Based on the outcome of today's engagements, the Bank will enable policy recommendations and interventions, to be shared with the relevant ministries to enable implementation. Today's recommendations and proceedings will also be published in a booklet, on the Bank of Namibia website, titled **Annual Symposium Booklet - 2024.**

Director of Ceremonies, ladies, and gentlemen

11. On behalf of the Bank of Namibia Board, Governor and Deputy Governors, Management and staff, we express our sincere gratitude to all the speakers, panellists, invited guests and the public (both present and online) for your excellent contributions.

12. We also acknowledge and appreciate the media represented here today, for not only capturing the event, but also for ensuring that the outcome of today's Symposium discussions and deliberations, will be broadcasted to the nation at large.

13. Our gratitude is also extended to the Management and staff of the Mercure Hotel, for excellent facilities availed today.

14. Thank you Mr. Ickua, Dr Emma, Mr. Zemburuka, Madam Sandra and the Bank of Namibia organising committee members for your excellent preparation for today's event and for ensuring yet another successful event. Thank you for a job excellently done!

15. We wish you a productive day ahead and look forward seeing you at our 26th Annual Symposium in 2025.

16. We wish you a great and fruitful day ahead.

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