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AGRO-PROCESSING: POTENTIAL TO ENHANCE THE CROP INDUSTRY IN NAMIBIA

1. Key Messages

- Although falling under the manufacturing sector of the economy, agro-processing can improve a country's economy greater than primary agriculture does as it has the potential to produce more value-added products and provide more employment opportunities.
- It further can reduce post-harvest losses in crops and improve production.
- As a net food importer, and as confirmed by the ITC-Trade map, Namibia imported crop-based processed food products worth N\$1,8 billion in comparison to exporting only N\$112 million worth of horticulture and agronomy processed food and agro-based products in 2020.
- The agro-processing sector within the crop industry in Namibia is very small, with very few enterprises being involved more in the processing of agronomy products than horticulture products, but again the bulk of the raw materials (wheat and white maize grains) used in manufacturing value-added agronomic products are imported into Namibia.
- The country reports incidences of food wastage, especially of horticulture products from farmers due to a lack of markets, as well as storage and processing facilities in the country.
- Value addition and the processing of primary crop products provide opportunities to enhance the producer's or farmer's income, introduce modern technology into the crop production and processing industry, minimise wastage in the food chain, and increase the export of processed products, etc.
- Policy interventions such as the development of a national agro-processing and value addition policy framework or strategy, infrastructure development, provision of credit facilities, development of quality standards for processed foods, incentives for enterprises in processed foods, encouraged foreign investment, etc. are some of the suggestions aimed at holistically addressing the various needs of the food processing industry in Namibia.

2. Introduction

The agricultural sector plays an important role in the country's economy and as a component of agriculture, agro-processing adds value to the sector. According to FAO (1997), agro-processing refers

to a subset of manufacturing that processes raw materials and intermediate products derived from the agricultural sector. With this definition, one can say that agro-processing leads to several improvements in the agricultural sector such as increased production of unprocessed farm products, reduced imports of raw or unprocessed farm products, and improved access to international markets, hence increased growth of the agricultural sector and job creation expansion opportunities. According to the International Business Center of the Michigan State University (2017), China has the largest food processing sector in the world followed by Canada and Germany at the 2nd and 3rd positions respectively. In Africa, Kenya is ranked number 1 in food processing, followed by Morocco at the 2nd position, Nigeria at number 3, Ghana at number 4 and South Africa at the 5th position.

Top Food Processing Countries Market Potential Index (MPI) (International Business Center, 2017)

Rank	Country	Rank	Country
Top 10 in the World		Top 5 in Africa	
1	China	1 (*41)	Kenya
2	Canada	2 (*45)	Morocco
3	Germany	3 (*52)	Nigeria
4	India	4 (*62)	Ghana
5	United Kingdom	5 (*64)	South Africa
6	Netherlands	NB: * represents the world ranking	
7	France		
8	Japan		
9	Spain		
10	Belgium		

As a net food importer, Namibia relies heavily on food imports not only of raw food products but also processed food products as the country's food processing sector is quite small. This policy brief draws insights into the current status quo on Namibia's agro-processing, more specifically in the agronomy and horticulture sector, and it also suggests some policy interventions that are possible for adoption to facilitate interest and stimulate the country's agro-processing sector that will, in turn, improve the crop sector at large.

3. The significance of agro-processing to food security

According to the University of Ghana's Institute of Applied Science and Technology (2022), agro-processing is important for the reasons that it enhances agricultural productivity and increases farm household incomes; it allows for the continuous availability of affordable safe, and nutritious food; allows for job creation; minimises food wastage; reduces food imports; reduces malnutrition as it allows for the production of fortified processed food; and promotes exports of processed foods to other countries and many other benefits. According to FAO (2011), 45% of all horticulture products (fruits and vegetables) and 30% of all (agronomy products) cereals are wasted globally, of which some percentage of it could probably be saved through processing and value addition.

In South Africa, the agro-processing sector is categorised into eleven divisions, namely, food, beverages, paper and paper products, wood and wood products, textiles, wearing apparel, furniture, tobacco, rubber products, footwear, and leather and leather products. In 2010, the agro-processing and

value-addition output contributed 29.1% to the country's manufacturing sector of the economy, of which, the food industry contributed the largest output at 42.4% and the highest employment level at 31.3% (Department of Agriculture, Forestry & Fisheries, Republic of South Africa, 2022). This, therefore, indicates the significance of agro-processing for the country's economy in terms of better productivity and increased growth of the Gross Domestic Product (GDP).

4. Status of agro-processing in Namibia

Namibia's agro-processing sector is relatively small and underdeveloped. Although equipped with several national agricultural policies such as the National Agricultural Policy (NAP), the Green Scheme Policy, the Agriculture Marketing and Trade Policy Strategy, etc., the country does not have a policy that is exclusive to the promotion of agro-processing and value addition of horticulture and agronomy products. There are, however, various support strategies/programmes that are mostly aimed at increasing the primary production of these products with very little focus on agro-processing and value addition.

These strategies include but are not limited to financing for production loans, implements and infrastructure purchases, farmland purchases, etc. (Agribank); production grants and loans including value addition to natural resources only (Environmental Investment Fund (EIF)); seed variety research, input costs assistance (ploughing, seeds, fertilisers, subsidies), etc. (Ministry of Agriculture, Water, and Land Reform); Horticulture Market Share Promotion (MSP) Scheme (Namibian Agronomic Board) and many others. Furthermore, Namibia does not allow the importation of processed agronomy products such as wheat flour, white maize meal, and pearl millet flour, and processors are only allowed to import the raw material (grain), to stimulate economic growth and create much-needed employment.

Unfortunately, despite so many good initiatives, Namibia remains a net food importer and it produces minimal primary crop products. Despite other challenges such as the unavailability of agricultural inputs (i.e. seeds, fertilisers, etc.), the lack of agro-processing opportunities may also be contributing to the low production of these primary products as usually 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, the majority of these processors use imported primary products mainly from South Africa (NAB, 2022).

Table 1: Namibia's agro-processed products analysis for 2020

Subhead	Processed product	Specific crop type (primary crop product used)	Imported value in 2020 (R)	Export/ Re-exported value in 2020 (R)
HEAD: PROCESSED FRUITS & VEGETABLES				
Cucumber and Gherkins (prepared & preserved)	Cucumbers & Gherkins, Provisionally Preserved	Cucumbers, Gherkins	572,000	114,000
	Cucumbers & Gherkins, Prepared/Preserved by Vinegar/Acetic Acid		1,962,000	-

Subhead	Processed product	Specific crop type (primary crop product used)	Imported value in 2020 (R)	Export/ Re-exported value in 2020 (R)
Processed vegetables	Potatoes - frozen	Potatoes	16,681,000	-
	Peas - frozen	Peas	1,177,000	-
	Beans - frozen	Beans	2,437,000	-
	Other leguminous vegetables - not frozen	Other legumes	294,000	-
	Spinach - frozen	Spinach	458,000	-
	Sweet corn - frozen	Sweetcorn	3,909,000	-
	Other vegetables - frozen	Other Vegetables	16,435,000	-
	Mixture of vegetables - frozen	Various vegetables	26,918,000	16,000
	Olives - provisionally preserved	Olives	458,000	-
	Mushrooms - provisionally preserved	Mushrooms	262,000	-
	Other mushrooms and truffles - provisionally preserved		114,000	-
	Assorted canned vegetables	Various vegetables	376,000	-
	Other vegetables - provisionally preserved		6,689,000	33,000
	Onions - dried	Onions	49,000	-
	Mushrooms - dried	Mushrooms	33,000	-
	Others (e.g. truffles) - dried	Truffles/Mushrooms	16,000	-
	Other dehydrated vegetables (Garlic powder, garlic flakes, potatoes, garlic) - dried	Garlic, Potatoes	507,000	51,302,000
	Tomatoes - whole or in pieces	Tomatoes	3,156,000	-
	Tomatoes - prepared/preserved by vinegar or acetic acid	Tomatoes	11,186,000	1,096,000
	Mushrooms - prepared/preserved by vinegar or acetic acid	Mushrooms/Truffles	1,832,000	-
	Other mushrooms and truffles - prepared/preserved		932,000	-
	Peas - prepared or preserved otherwise than vinegar or acetic acid, not frozen	Peas	3,042,000	-
	Beans - shelled, prepared or preserved otherwise than vinegar or acetic acid, not frozen	Beans	4,039,000	-

Subhead	Processed product	Specific crop type (primary crop product used)	Imported value in 2020 (R)	Export/ Re-exported value in 2020 (R)
	Other beans - shelled, prepared or preserved otherwise than vinegar or acetic acid, not frozen		19,183,000	-
	Asparagus - prepared or preserved otherwise than vinegar or acetic acid, not frozen	Asparagus	720,000	2,437,000
	Olives - prepared or preserved otherwise than vinegar or acetic acid, not frozen	Olives	3,320,000	-
	Sweet corn - prepared or preserved otherwise than vinegar or acetic acid, not frozen	Sweetcorn	4,203,000	-
	Bamboo shoots	Bamboo	213,000	-
Processed Fruits, Juices & Nuts	Other fruits and nuts - frozen NOT containing sugar	Various fruits and nuts	654,000	-
	Cherries preserved	Cherries	327,000	-
	Other fruits and nuts provisionally preserved	Various fruits and nuts	2,240,000	-
	Apricots - dried	Apricots	196,000	-
	Prunes - dried	Prunes	425,000	-
	Apples - dried	Apples	65,000	-
	Peel of citrus fruit/melons incl watermelons - preserved in brine or other preservative solutions	Citrus fruits, watermelons	-	16,000
	Homogenised preparations (jams, fruits jellies, marmalades, fruit or nut puree and pastes) - whether or not containing added sugar or other sweetening matter	Various fruits and nuts	6,035,000	-
	Jams jellies marmalades - citrus fruits	Citrus fruits	5,184,000	-
	Pineapples - prepared/preserved containing added sugar or other sweetening matter	Pineapples	4,301,000	-
	Pears - prepared/preserved	Pears	229,000	-
	Apricots - prepared/preserved	Apricots	392,000	-
	Cherries - prepared/preserved	Cherries	589,000	-
	Peaches - prepared/preserved	Peaches	1,783,000	-
	Strawberries - prepared/preserved whether or not containing added sugar or other sweetening matter	Strawberries	131,000	-

Subhead	Processed product	Specific crop type (primary crop product used)	Imported value in 2020 (R)	Export/ Re-exported value in 2020 (R)
	Palm hearts - prepared/preserved	Palm trees	49,000	-
	Cranberries	Cranberries	164,000	-
	Mixtures of citrus fruits, cranberries, pears, apricot etc.	Citrus fruits, cranberries, pears, apricots etc	9,060,000	-
	Orange juice - frozen	Oranges	49,000	-
	Orange juice - NOT frozen		24,220,000	33,000
	Grapefruit juice	Grapefruits	98,000	-
	Other grapefruit juice		458,000	-
	Other single citrus fruit juice	Citrus fruits	11,497,200	376,000
	Pineapple juice	Pineapples	1,456,000	65,000
	Tomato juice	Tomatoes	245,000	-
	Grape juice	Grapes	8,357,000	16,000
	Apple juice	Apples	26,346,000	343,000
	Mango juice	Mangoes	425,000	-
	Pulses	Yellow peas	Peas	327,000
Green peas		278,000		-
Other peas		3,990,000		-
Other chickpeas		65,000		-
Beans of the spp. Vigna Radiata (L.) Wilczek		Beans, other legumes	6,231,000	-
Other dried leguminous vegetables (excl. guar seeds)			3,631,000	-
Other dried and shelled leguminous vegetables - split			65,000	-
HEAD: OTHER PROCESSED FOODS				
Cocoa products	Cocoa beans - whole/broken, raw/roasted	Cocoa	49,000	-
	Cocoa paste - wholly/partly defatted		196,000	-
	Cocoa butter - fat & oil		33,000	-
	Cocoa powder - containing added sugar/other sweetening matter		4,285,000	-
	Cocoa powder - NOT containing added sugar/other sweetening matter		4,922,000	-
	Other food preparations in blocks/slabs/bars - filled		51,040,000	16,000
	Other food preparations in blocks/slabs/bars - NOT filled		12,511,000	49,000

Subhead	Processed product	Specific crop type (primary crop product used)	Imported value in 2020 (R)	Export/ Re-exported value in 2020 (R)
Cereal Preparations	Rolled/flaked grains of oats	Oats	2,388,000	-
	Other worked grains of oats - oats		654,000	-
	Wheat gluten - whether or not dried	Wheat	769,000	-
	Mixes and doughs for the preparation of bakers		38,349,000	16,000
	Other malt extracts	Rye, wheat, rice or corn/maize	65,000	1,014,000
	All other preparations of flour meal starch/malt extract		3,124,000	1,537,000
	Uncooked pasta - not stuffed/otherwise prepared, containing eggs	Wheat	621,000	-
	Other uncooked pasta - not stuffed/otherwise prepared pasta		14,440,000	25,822,000
	Stuffed pasta - cooked/otherwise prepared		2,437,000	-
	Other stuffed pasta - whether or not cooked/otherwise prepared		3,205,000	442,000
	Unprepared couscous		507,000	360,000
	Other couscous		589,000	-
	Tapioca and substitutes	Cassava	1,014,000	-
	Bulgur wheat obtained from unroasted cereals	Wheat	2,159,000	-
	Crispbread	Rye	8,422,000	16,000
	Gingerbread and the likes - sweet biscuits, waffles and wafers	Wheat	1,815,000	-
	Sweet biscuits		139,366,000	6,525,000
	Rusks, toasted bread and similar toasted products		14,244,000	-
	Pastries and cakes, biscuits and other bakers wares		196,000	-
	Biscuits not elsewhere specified or included		671,000	-
	Extruded or expanded products, savoury or salted		785,000	-
	Papad (a thin wafer-like Indian product)	Beans	752,000	-
	Other bread, pastry, rice papad and similar products	Wheat	86,249,000	49,000
Maize (corn) flour	Maize	376,000	15,978,000	

Subhead	Processed product	Specific crop type (primary crop product used)	Imported value in 2020 (R)	Export/ Re-exported value in 2020 (R)
Milled products	Other cereal flour	Other cereal flour	8,749,000	33,000
Sugars and sugar confectionery	Cane or beet sugar and chemically pure sucrose, in solid form (excl. cane and beet sugar containing added flavouring or colouring and raw sugar)	Sugarcane	996,332,000	4,350,000
	Raw cane sugar, in solid form, not containing added flavouring or colouring matter (excl. cane sugar of 1701 13)		15,323,000	33,000
	Raw cane sugar, in solid form, not containing added flavouring or colouring matter, obtained without centrifugation		65,000	-
	Refined cane or beet sugar, containing added flavouring or colouring, in solid form		2,175,000	16,000
	Flour of potatoes		Potatoes	311,000
Miscellaneous preparations	Flakes, granules and pellets of potatoes		1,308,000	131,000
	Flour, meal and powder of the dried leguminous vegetable	Various legumes/beans	82,000	-
	Other flour, meal and powder	Other cereal flour/legumes	49,000	-
	Other starch	Wheat, maize, potatoes	8,553,000	33,000
	Soya sauce	Soya beans	3,434,000	1,000
	Tomato ketchup and other tomato sauces	Tomatoes	96,258,000	3,000
Grand Total Imports/Exports (incl. re-exports) (R)			1,779,607,200	111,928,343

Source: ITC Trade Map (2023)

As indicated above, Namibia is a net importer of horticulture and agronomy processed food products and the country imported about N\$1,8 billion of some processed food products in 2020. Although some of these exports may include re-export figures to other countries, the amount is still quite high compared to the country's exports of only N\$112 million of agro-processed food products under analysis during the same year. Additionally, products such as vegetable oils and fruit juice concentrates are being imported into the country in bulk for repackaging. On the other hand, although the country imports most of its food products, several reports of food wastage, especially for horticulture products, are still being reported due to a lack of market and processing opportunities. The analysis in the table above excludes alcoholic beverages, tobacco products, essential oils, starches and a few other food products.

Table 2: Summary of domestic production and export of agro-processed products in Namibia during 2021

HS	Product Group Description According to the International Trade Centre	Raw Materials	Products	Domestic Production	Imports	Exports
				Total Value N\$	Total Value N\$	Total Value N\$
210320	Tomato ketchup and other tomato sauces	Tomato paste: About 1300 tons are imported annually	Tomato sauce	67,640,000	109,172,000	120,000
071000	Potatoes, uncooked or cooked by steaming, or by boiling water, Frozen: But chilled in this case	Baby potatoes	Baby potatoes peeled	44,200	6,125,000	-
071080	Vegetables, uncooked or cooked by steaming or by boiling water Frozen. But chilled in this case: Cut, sliced, diced	Butternuts	Butternuts	561,623	10,346,000	-
		Pumpkins	Pumpkins	586,266		
		Carrots	Carrot	82,196		
		Cabbage	Cabbage	797,313		
		Onions	Onion	38,132		
		Sweet potatoes	Sweet potato	195,000		
		Lettuce	Lettuce	11,700		
		Mushrooms	Mushroom	-		
071090	A mixture of vegetables, uncooked or cooked by steaming, or by boiling water, frozen (excluding potatoes, spinach and sweetcorn). But chilled in this case	Carrots, butternuts, pumpkins, onions, English cucumber, sweet potato, cabbage, etc.	Mixed vegetables (cut, sliced, or diced)	63,005.28	21,696,000	1,000
071030	Spinach, uncooked or cooked by steaming, or by boiling water, Frozen. But chilled in this case	Spinach	Spinach chopped	1,201,200	517,000	-

071022	Beans, uncooked or cooked in steaming, or boiling water, frozen. But chilled in this case Dried vegetables and mixtures of the vegetable whole, cut, sliced, broken, or in powder but not further prepared (excl. dried onion & dried mushroom)	Green Beans Spinach and mutete	Cut green Beans Dried spinach	234,000	4,206,000	-
2009	Fruit juice, incl. grape must, and vegetable juice, unfermented, not containing added spirit	Juice Concentrates/ Nectar (1191 m3) imported	Juice/ nectar (m3)	52,784,185	381,960,000	1,225,000
TOTAL				124,283,886	534,022,000	1,346,000

Source: NAB (2021) & ITC Trade map (2024)

As illustrated in Table 2 above, a study conducted by the NAB in 2021 revealed that Namibia produced horticulture agro-processed products valued at N\$124 million. These products mainly comprised of tomato sauce, tomato and chilli sauce added to fish for canning, chilled vegetables (cut, diced, or sliced), dried vegetables and fruit juice. The country also imported these products valued at N\$534 million and an export of N\$1,3 million during the same year (2021) (ITC Trade Map, 2024). The figures above indicate that although producing some of the horticulture agro-processed products, Namibia is still unable to meet its domestic demand hence the high imports to complement local production. This, therefore, warrants the need for the country to develop investment in this sector as a strategy to remedy not only the food wastage situation but also to boost local production.

5. Conclusion

Agro-processing is one of the very important aspects of agriculture and when implemented efficiently, its contribution to the country's economy is far greater than primary agriculture. Namibia's agro-processing industry in horticulture and agronomy is very insignificant with its largest food export being in its primary form and high import of processed foods, and the country relies heavily on importing raw materials such as wheat and white maize grains. Investment in this industry could benefit the country in different ways such as:

1. Enhancing the producer's or farmer's income through extensive utilisation and value addition of the primary agricultural produces, as well as increased and diversified production.
2. Providing opportunities to introduce modern technology into the crop production and processing industry, especially in the wake of the Fourth Industrial Revolution (4IR).
3. Minimising food chain waste by developing infrastructure for storing, transporting, and processing agricultural food products.

4. Increasing the export of processed products and improved job opportunities due to an extended food chain, thereby leading to an improved national economy.

6. Policy recommendations

Although having substantial benefits, full participation in agro-processing, especially in Namibia, is limited due to several challenges such as limited access to finance, lack of consistent raw materials that are required to optimally operate the processing facilities, inadequate infrastructure, inability to comply with industry food safety standards, limited access to markets, lack of technical skills and appropriate technology, etc. With the above possible challenges in mind, this policy brief recommends the following measures to support and encourage participation and the development of the agro-processing sector to boost the Namibian crop industry:

1. The Ministry of Agriculture, Water and Land Reform (MAWLR), NAB and all interested parties in the crop industry to develop a national agro-processing and value-addition policy framework or strategy that is holistically aimed at addressing the various needs of the food processing industry to enhance its growth.
2. The MAWLR to develop adequate infrastructure especially those with food processing components to develop the food processing industry such as the national Fresh Produce Hubs.
3. Agribank and commercial banks to create finance facilities targeting current and upcoming small and medium enterprises involved in agro-processing. Financing should also be extended to the producers or farmers to stimulate a rapid increase in food production to keep up with the demand from the processors.
4. Namibian Standards Institution (NSI) together with NAB should ensure the development of national quality standards for common fruits, vegetables, and grains to promote quality and national standardisation of both fresh and processed products that will ensure easy access to processed products into local and export markets.
5. All interested parties in the crop industry should encourage participation and provide funding in Research and Development activities that will result in the development of the agro-processing industry through innovations.
6. Facilitate the coordination of national government stakeholders which are vital in the development of the agro-processing sector such as NSI, Agribank, MAWLR, NAB, and the National Commission on Research, Science and Technology (NCRST) to holistically address the concerns of the industry.
7. The NAB, crop producers/farmers and traders/processors should promote production agreements between farmers and agro-processors to ensure that there is a link in the production and marketing chain with a mutually beneficial integration.
8. The MAWLR to provide incentives for enterprises involved in the agro-processing industry of horticulture and agronomy products. These incentives can be in the form of but are not limited to export promotion subsidies, transport subsidies, procurement preferences on value-added

products by government agencies, subsidies for participation in fares and exhibitions (whether national or international), etc.

9. All interested parties in the crop industry to create a conducive environment for foreign investment in the crop processing sector and any other sector that is directly influencing the development of the crop value addition.

7. References

Department of Agriculture, Forestry & Fisheries. Republic of South Africa. 2022. https://www.nda.agric.za/doaDev/sideMenu/AgroProcessingSupport/docs/Brief_introducing%20agro%20processing.pdf

Erastus N. 2022. The Villager Newspaper. Almost 50% of horticulture produce goes to waste. <https://www.eaglefm.com.na/news/almost-50-of-horticulture-produce-goes-to-waste/>

FAO, 1997. The State of Food and Agriculture. Rome: FAO. www.fao.org.

FAO. 2011. Global Food Losses and Food Waste. <https://www.fao.org/3/i2697e/i2697e.pdf>

International Business Center. Michigan State University. 2017. Food Processing Market Potential Index. <https://ibc-static.broad.msu.edu/sites/globaledge/medc/industry-mpi/pdfs/food-processing-MPI-Insights-and-Rankings-2017.pdf>

Namibian Agronomic Board. 2021. An analysis of Namibia's potential for horticulture agro-processing. <https://www.nab.com.na/wp-content/uploads/2023/02/AN-ANALYSIS-OF-NAMIBIAS-POTENTIAL-FOR-HORTICULTURE-AGRO-PROCESSING-00087-1.pdf>

University of Ghana. Institute of Applied Science and Technology. 2022. <https://www.ug.edu.gh/iast/node/5>

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