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Constituted by Act 20 of 1992

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Creating a marketing environment that is conducive to growing and processing crops in Namibia



MARKET INTELLIGENCE REPORT

PEARL MILLET (MAHANGU) GRAIN

ISSUE 2 OF 2021

INTRODUCTION

Pearl millet [*Pennisetum glaucum*], locally (in Namibia) known as *Mahangu* is the most widely grown staple food by the majority of poor and small landowners in Asia and Africa. In Namibia, pearl millet is a staple food for more than 60% of the population (Embashu & Nantanga, 2019). Although second highest in terms of production, Namibia still imports a majority of its pearl millet to fulfil its local demand.

This second issue of the Market Intelligence Report is focusing on Pearl Millet. As part of the main three staple grains produced in Namibia and to continue helping *Mahangu* producers, processors, and the general public in learning more about this commodity, in its second issue of the Market Intelligence report, the Namibian Agronomic Board (NAB) has prepared this guide on important market information about *Mahangu* or Pearl Millet, from global, regional and domestic perspectives.

GLOBAL OVERVIEW

PRODUCTION: Millet is the sixth most important cereal crop in the world after maize, rice, wheat, barley, and sorghum. According to the FAO, about 49.66% of millet in the world is produced in Asia while 46.53% is produced in Africa. Europe, America and Oceania countries (Australia, New Zealand, and others) produce 2.48%, 1.20% & 0.12% of the world's millet respectively.

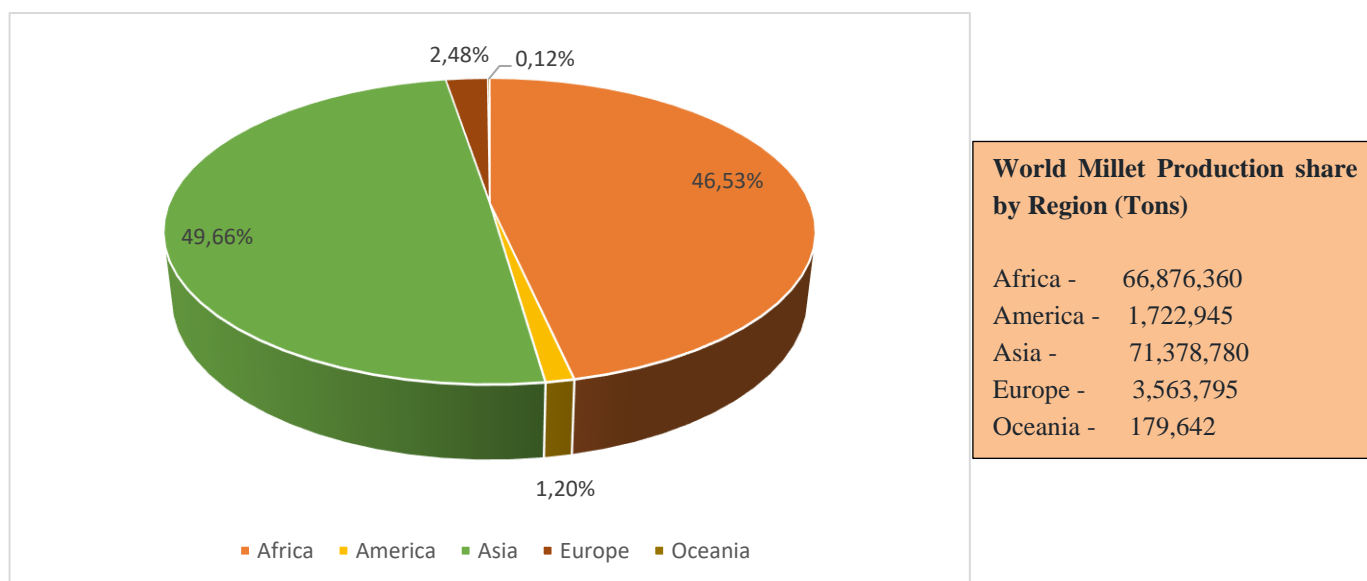


Figure 1: World Millet Production Share by Region

Source: FAOSTAT (2020)

India, Niger, and China are the largest producers of millet in the world, accounting for more than 55% of global production. For many years, India has been the world's major producer of millet, however in recent years, there has been an increase in millet production in Africa (Market—Growth, G., 2019). According to FAO (2020), India produced an average of over 11 million tons of pearl millet in each of the preceding 5 years followed by Niger and China with an average production of over 3 million tons and over 2 million tons during the same period respectively.

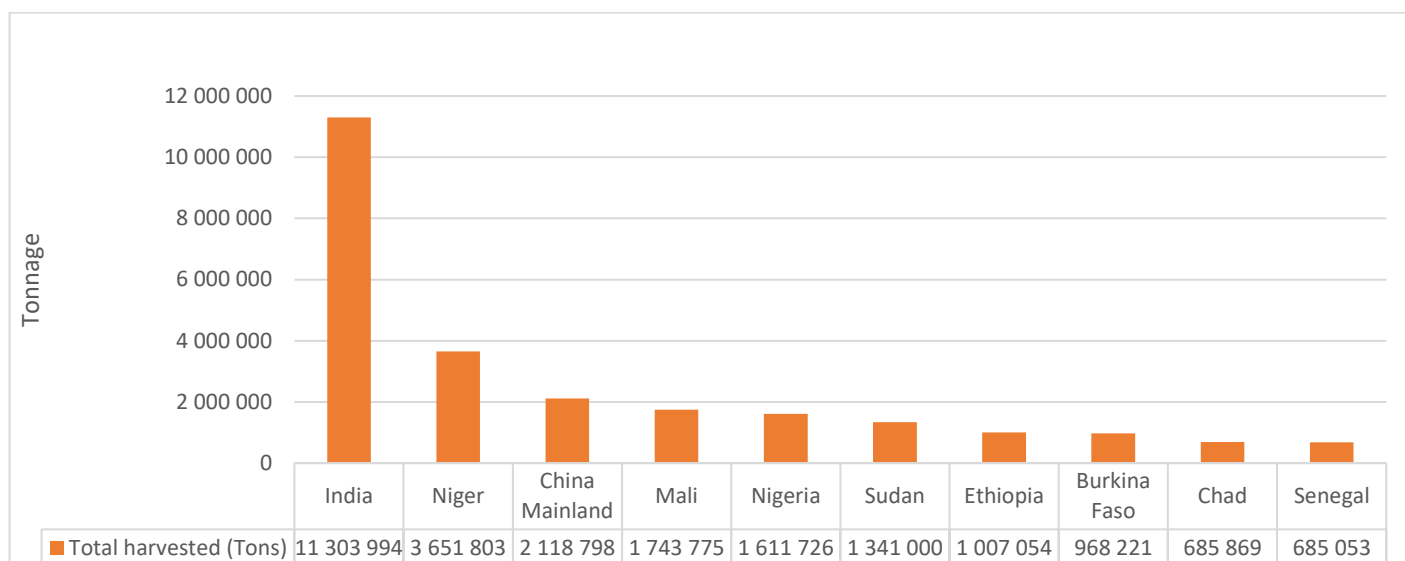


Figure 2: Top 10 World Millet Producers (Average: 2014-2018)

Source: FAOSTAT (2021)

CONSUMPTION: Although being one of the basic staple food especially in Africa, global millet consumption has declined at a rate of 0.9% due to various factors, such as, rising incomes, growing urbanization and government policies. It is however expected to show a positive drive during the 2019-2024 forecast period, according to the Agriexchange Market Intelligence report for millets (Agriexchange, 2020). This could be attributed to the growing demand for millet as feedstock and infant food, due to its high productivity in dry and high-temperature conditions. The report further states that the millet market is set to grow from its current market value of more than US\$9 billion to over US\$12 billion by 2025.

According to Miller Magazine (2020) millet is generally consumed where it is produced hence millet on international trade is significantly low. This is generally true in Africa as most African countries produce millet through subsistence farming for household consumption. According to Miller Magazine (2020), India is not only the top producer of millet but also the top consumer of this grain, having consumed about 11.3 million tons out of the total production of 11.6 million tons in the 2016/17 season. Of which was mostly used for human consumption or animal feed. India is followed by Niger with 3.8 million tons, China with 1.9 million tons, Nigeria with 1.6 million tons, Mali with 1.8 million tons, Burkina Faso with 1 million tons and Chad with 675 thousand tons during the same season respectively.

EXPORT: There is limited reliable data on the world millet trade especially from the Food and Agriculture Organization (FAO). However, according to World Integrated Trade Solution (WITS) (2020), as of 2018 the world's top five millet exporters were United States with 108 million tons (valued at US\$ 38.9 million), India with 74 million tons (valued at US\$ 23.8 million), France with 34 million tons (valued at US\$ 12.1 million), Russian Federation with 42 million tonnes (valued at US\$ 9.2 million) and lastly Ukraine with 25 million tons (valued at US\$ 7.8 million).

IMPORT: According to the World Integrated Trade Solution (WITS) (2020), as of 2018, the top five millet importing countries were Indonesia with 55 million tons (valued at US\$ 18.6 million), European Union with 38 million tons (valued at US\$ 18.2 million), Germany with 25.9 million tons (valued at US\$ 25.9 million)

and Belgium with 22 million tons (valued at US\$ 9.5 million) and Korea Republic with 13 million tons (valued at US\$ 8.1 million) respectively.

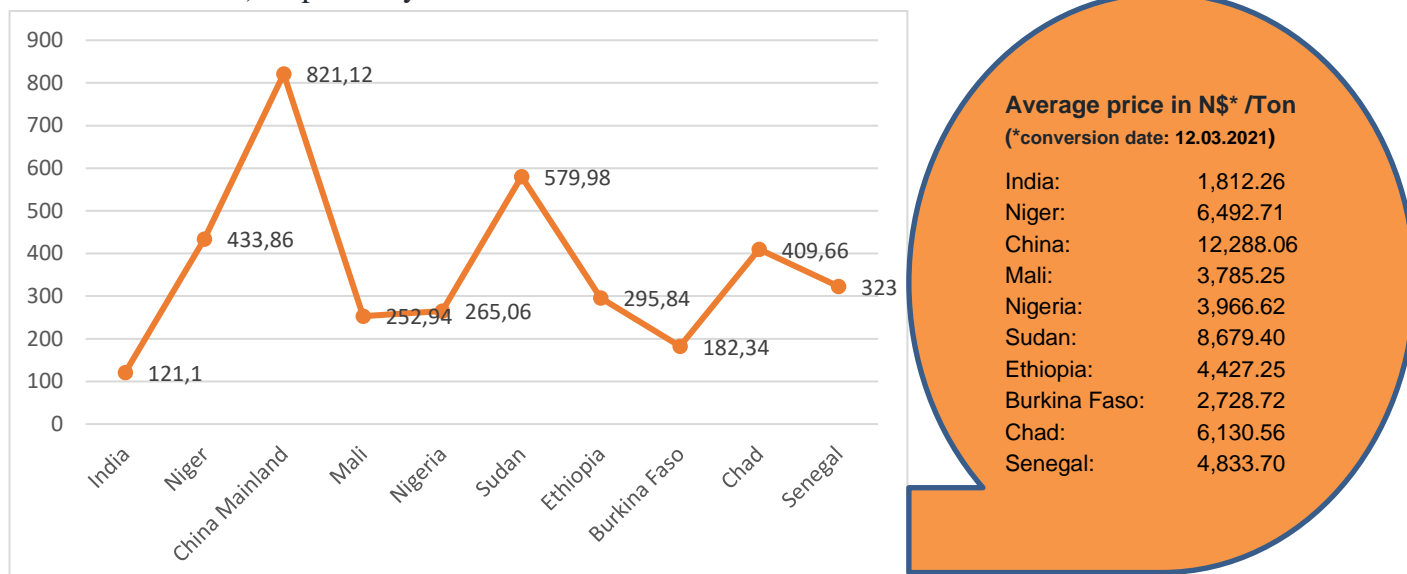


Figure 3: World Millet Average Price (US\$/Ton) (for last recorded 5 years)

Source: FAOSTAT (2020)

Figure 3 indicates that India has the lowest average price of millet at US\$121.10 per ton (equivalent to N\$1,801.97/ton), this could be attributed to the fact that they are also the world's largest millet producers hence the high supply might have contributed to the low price. China Mainland has the highest millet price of US\$821.12 per ton (equivalent to N\$12,218.27 per ton).

Figure 3 further indicates a price of US\$821.12 (equivalent to N\$12,288.06) per ton of millet in China, which is relatively high compared to other countries. This high price could be attributed to the country's Grain Trade Policy aimed to achieve grain self-sufficiency. Through this policy, the Chinese government has controlled the grain market by setting a minimum price for grain, however, the increasing demand and increasing global prices have caused domestic prices of grain (including millet) to increase drastically and also surpassing the global market price (Lu, Zhu & Yu, 2013). Other factors causing higher millet prices in China, in addition to the relationship between market supply and demand, are sudden natural disasters, government regulation policy, speculative hype and improper public opinion (Guojiang, 2010).

AFRICA, SOUTHERN AFRICA, AND DOMESTIC PERSPECTIVE

According to Orr, Mwema, Gierend and Nedumaran (2016), out of the 33 million hectares planted for millet between 2010 – 2012 worldwide, about 60% (19 million hectares) is in Africa with 38% (14 million hectares) grown in Asia. Although India is the largest millet producer in the world, the next highest world millet producer is Niger, an African country having produced 18,259,016 tons between 2014-2018. Moreover, other African countries such as Mali, Nigeria, Sudan, and Ethiopia are amongst the world's top 10 millet producers in that descending order.

In terms of area planted, millet production is increasingly concentrated in Africa with an increased world production share from 28% in 1981-83 to 45% in 2010-12. Most of the area planted for millet is in Western Africa where countries such as Niger and Mali are situated, of which these forms part of the highest millet producers in Africa, (Orr et al., 2016).

Of the top 5 millet producers in Africa, Niger produced an average of 39% (3,651,803 tons) of millet in Africa per year during the period 2014 - 2018, followed by Mali with 19% (1,743,775 tons), Nigeria with 17% (1,611,726 tons), and Sudan and Ethiopia with 14% (1,341,000 tons) and 11% (1,007,054 tons) over the same period respectively.

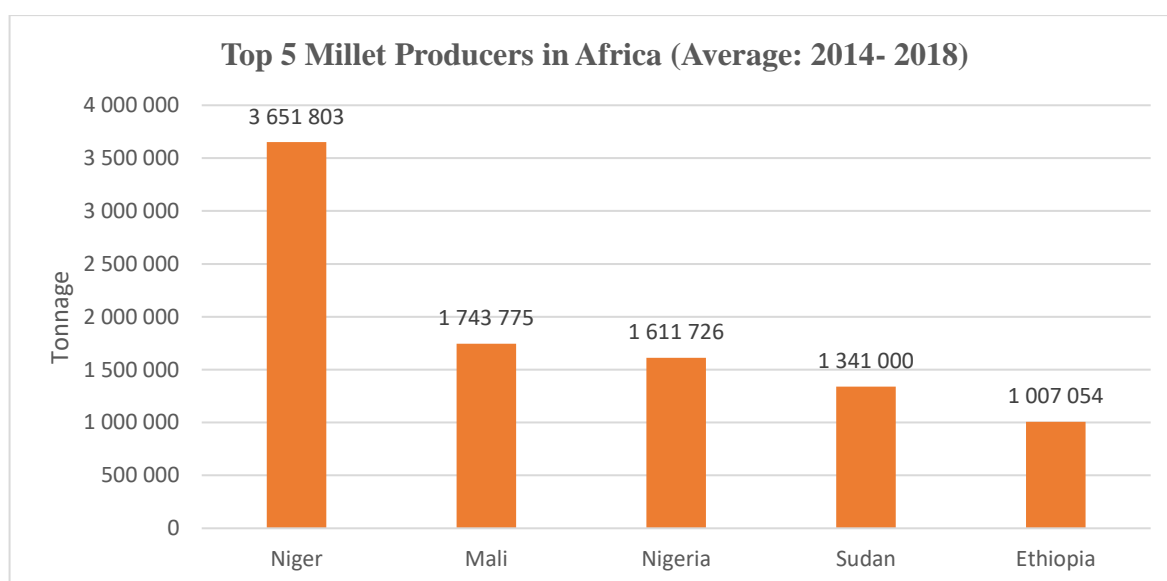


Figure 4: Top 5 Millet Producers in Africa (Average: 2014- 2018)

Source: FAOSTAT (2020)

World consumption of millet varies greatly between continents. However, more than 40% of global millet consumption is held by African countries mainly Niger, Mali, Nigeria, Burkina Faso, and Sudan. This is understandably so because millet is a key staple food in Africa and represents about 75% of total cereal food consumption in Niger, over 30% in other African countries (25% of total cereal food consumption) and about 20% in Uganda (FAO, ICRISAT,1996).

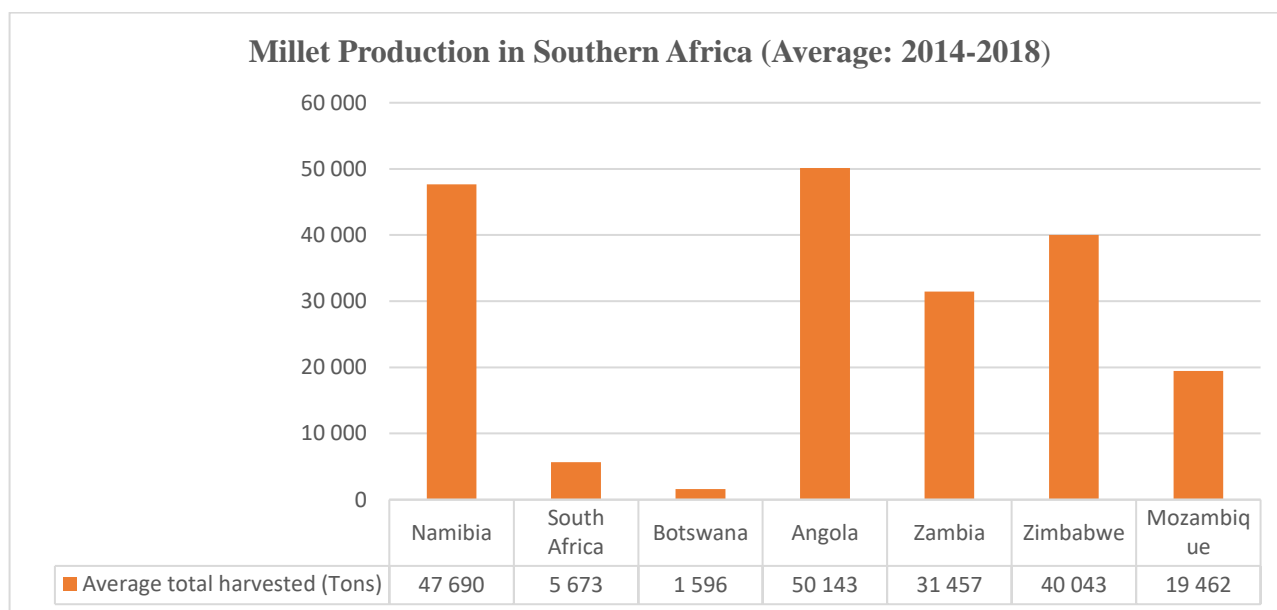


Figure 5: Millet Production in Southern Africa (Average: 2014-2018)

Source: FAOSTAT (2021)

According to FAO (2021), in Southern Africa, Angola is the highest millet producer, with an average of 50,143 tons harvested per year during the 2014-2018 period. Angola is followed by Namibia which produced an average of 47,690 tons per year during the same period respectively. Botswana produced the least millet of an average of 1,596 tons per year.

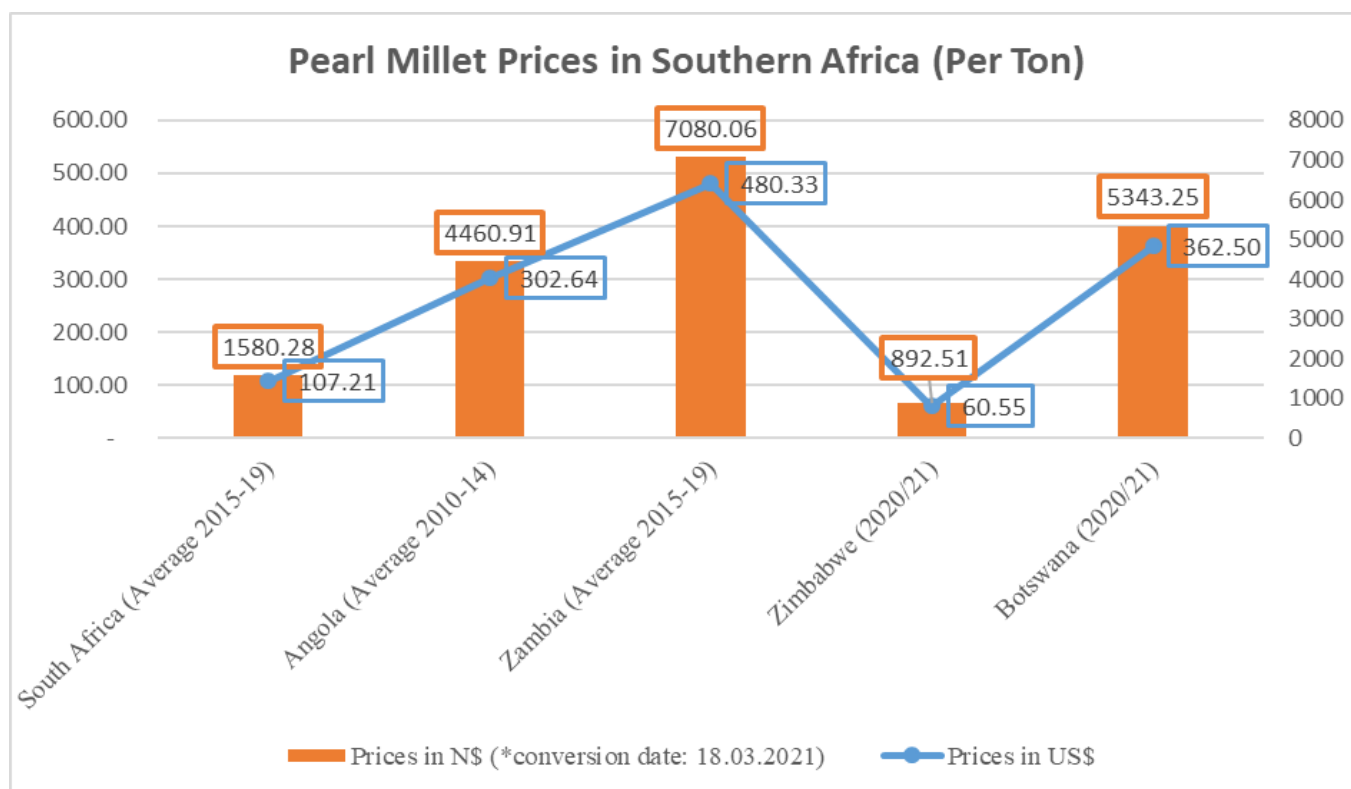


Figure 6: Pearl Millet Prices in Southern Africa (Per Ton)

Sources: FAOSTAT (South Africa, Angola & Zambia)

Botswana Agricultural Marketing Board (BAMB) (Botswana)
Agricultural Marketing Authority (AMA) (Zimbabwe)

As mentioned in the preceding section, there is very little documented data or information about pearl millet or millet in general, especially in developing countries, as such reliable data is difficult to obtain. Figure 6 indicates a combination of sources and data collected and available in terms of pearl millet prices in Southern African countries.

Similar to Namibia (as per the mandate of NAB), Botswana and Zimbabwe have government statutory structures in place which set up the prices of pearl millet amongst other crops on an annual basis to promote and control their country's crop industry. Pearl millet price is low in Zimbabwe at US\$60.55/ton (equivalent to N\$892.51/ton) during the 2020/21 marketing year while Zambia recorded the highest average price of US\$480.33/ton (equivalent to N\$7,080.06/ton) between 2015-2019 respectively.

Botswana would be the best benchmarking country for Namibia as its price is highly relatable to Namibia's price. Being set at US\$362.50/ton (equivalent to N\$5,343.25/ton) for the marketing year 2020/2021 is equivalent to that of Namibia which is at N\$5,327.00/ton for the same marketing period, however, pearl millet production in Botswana remains relatively low compared to all other Southern Africa countries.

In Namibia, local pearl millet production has been significant over the years with the highest number recorded during the 2017/2018 marketing year totalling 2,344 tons. Unfortunately, imports during this marketing year were still higher than local production which was recorded at 3,469 tons. The local production of the 2020/2021 marketing year looks positive with over 3,400 tons already harvested between April – October 2020 covering over 80% for the total demand of 4,135 tons during the same period. The graph below shows the local (Namibian) pearl millet performance.

Pearl Millet Grain: Local Production, Imports and Local Consumption (Tonnage)

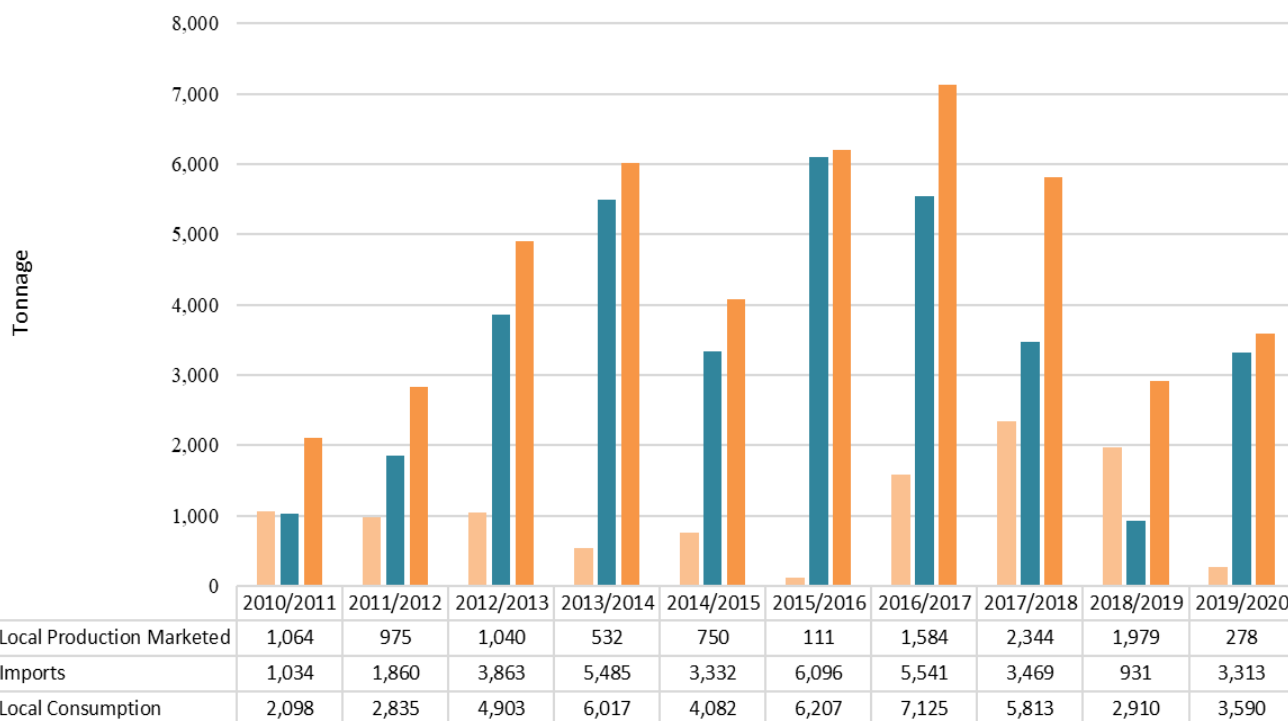


Figure 7: Pearl Millet Grain Local Production, Imports and local consumption (Tonnage)

Source: NAB, 2020

The total local production of pearl millet for 2019/2020 was 278 tons, while the imports stood at 3,313 tons. The local production for 2019/2020 marketing year was affected by severe drought occurrence which resulted in only 8% (278 tons) of pearl millet produced locally, while 92% (3,313 tons) were imported from India. On a lighter note, the 2020/2021 marketing year recorded a good harvest (3,430 tons from April – October 2020) and hence very small quantities of pearl millet were imported (705 tons from April – October 2020) as a result of good rains received.

According to the records with the NAB, pearl millet is exclusively imported from India. This could be correlated to the low prices of millet in India (N\$1,801.97/ton) in comparison to other countries as illustrated in Figure 7 above.

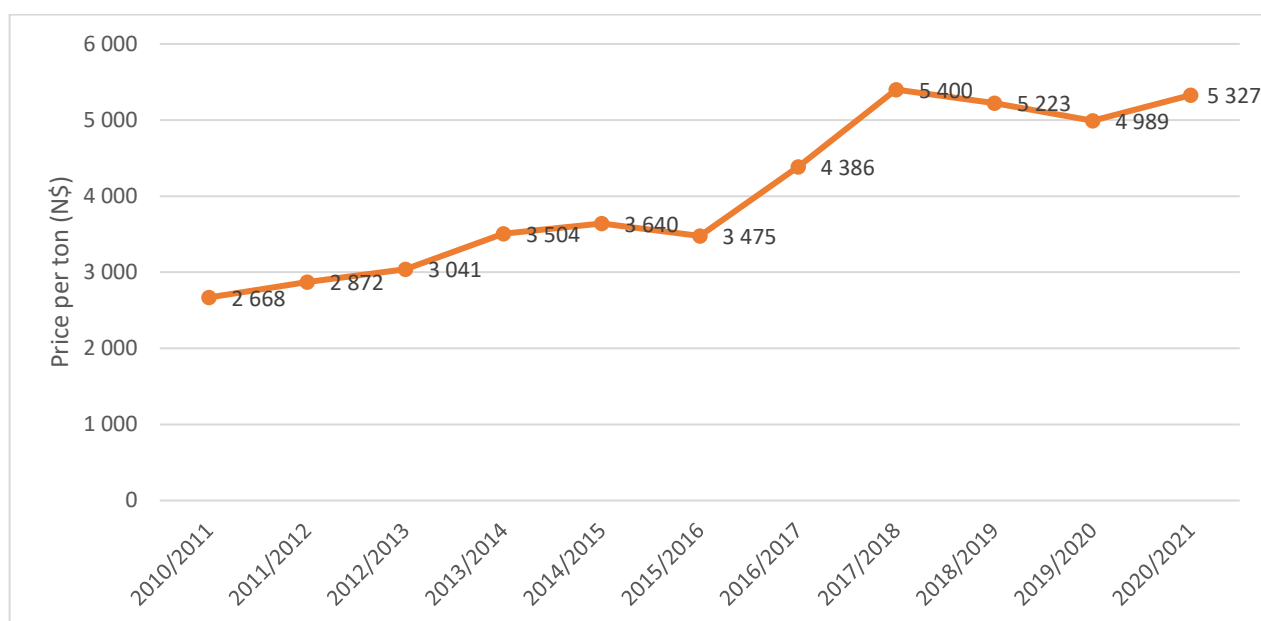


Figure 8: Local Pearl Millet Floor Price per Ton

Source: NAB, 2020

The trend in local pearl millet prices as indicated in the graph above shows a 3% price reduction in 2018/2019 (N\$5,223 per ton from N\$5,400 per ton) and a further 4% price reduction in 2019/2020 (N\$4,898 per ton). The price reduction for the 2019/2020 financial year could be attributed to the bulk harvest of pearl millet from the high supply as a result of good rainfall received during this harvesting period. The price is further expected to increase by 7% for the 2020/2021 marketing season to N\$5,327 per ton.

KEY POTENTIALS TO UNLOCK GROWTH IN PEARL MILLET FARMING

As per the statistics presented herein, demand for pearl millet as a staple food for the majority of many African countries including Namibia continues to increase significantly over the years. Increasing rural to urban migration also indicates that fewer people are left in villages to farm and/or grow pearl millet for subsistence farming, hence, creating opportunities for commercial pearl millet farming and eventually a marketplace. To unlock the growth of pearl millet production, potential farmers need to shift their mindset from subsistence farming to a commercial setup to meet the increasing demand while eventually unlocking opportunities for export markets.

Pearl millet is also a vital feedstock for cattle, goats and chickens which can also be explored as an enterprise. Moreover, demand for pearl millet value-added products is picking up in the market and can be another factor to influence pearl millet farming on a commercial level. Given its adaptability to dry climatic conditions, Namibian farmers should explore how pearl millet farming can be developed and commercialised.

With pearl millet being gazetted as a controlled crop under the Agronomic Industry Act 20 of 1992 in Namibia, potential local farmers should take advantage of the favourable market environment coupled with conducive climatic conditions and expand the local pearl millet production.



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