



**NAMIBIAN
AGRONOMIC BOARD**

AGRONOMY AND HORTICULTURE MARKET DEVELOPMENT DIVISION

AGRONOMY MARKET DEVELOPMENT SUBDIVISION

WHITE MAIZE PRODUCTION FORECAST REPORT

HARVESTING/MARKETING SEASON 2024



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1. INTRODUCTION

White maize is a staple grain crop grown mainly for human consumption in Namibia, and production mainly takes place in the Zambezi, Kavango, North Central (Etunda), Karst (Maize triangle), Central (Summerdown and Hochfeld), and South (Hardap) crop production zones of Namibia. It is produced under both rainfed and irrigated production, and planted from October to January, for harvesting in April to October every year.

The marketing of locally produced white maize grains is managed through the White Maize Marketing Mechanisms/Agreement as signed by organised producers and millers. The marketing of white maize grains officially starts from the 1st of May every year, until such time when all the available grains are marketed to registered millers/silos.

To effectively and efficiently facilitate the marketing of locally produced white maize grain, the production data is collected at the beginning of each planting season to estimate the expected production and hence the tonnage to be taken up by registered local millers/silos. This data is also eminent in the implementation of the close and open border period.

During the 2023 marketing season, a total of **67,118** tons was marketed from the 1st of May to the 31st of March 2024. Meanwhile, a total of **37,872** tons is expected to be harvested and marketed during the 2024 marketing season from a total of **7,382 ha**. This represents a decrease of **29,246 (43.5%)**, compared to the tonnage marketed in 2023 marketing season. The decline in the expected harvest is attributed to crops failures due to extreme drought experienced in all production areas of Namibia during the 2024/2025 planting season. There is also a significant decline in the number of producers who planted maize in 2024/2025 and thus hectares planted.

This report presents the total national grain tonnage expected from all production areas to be marketed during 2024/2025 marketing season. The report further provides insight into the total hectares planted and the average yield per ha expected under both rainfed and irrigation production as well as a comparison of the white maize volume and hectares expected for 2024 versus the tonnage and hectares harvested during 2023 marketing season.

Additionally, the report also highlights the expected harvest for other grain crops such as yellow maize, groundnuts, sunflower, sorghum and beans planted during the 2024 planting season for monitoring purposes.

2. METHODOLOGY

The white maize production data was collected based on the subjective yield estimation method, which involves the estimation of crop yield based on the producer's historical yield estimation, and data was validated based on average yields per hectare per production area for the previous seasons. The data collection process involved sending expected crop production data collection form/01 to the producers via email, and on the NAB website. Once the forms have been completed by the producers, they were sent back to the NAB via email or hand delivery. Producers who did not respond via email were contacted telephonically to submit the completed forms.

In the Zambezi production area, producers' registration and crop estimate data collection was conducted through registration of the expected harvest at the Agricultural Development Centres (ADCs), with assistance from the officials of the Ministry of Agriculture, Water, and Land Reform stationed at the ADCs. Radio announcements were made in different local languages, in order to sensitize producers who, wish to market white maize grains during the 2024/2025 marketing season to submit their expected harvest to the NAB. Completed forms from the ADCs were thereafter captured into Excel. Data captured was cleaned and analysed in Microsoft Excel, using both graphical and tabulation analysis.

A total of **403** white maize producers have registered their expected harvest from February to April 2024, including **83** white maize commercial producers (inclusive of the Green Scheme Irrigation Projects) and **320** surplus white maize producers from the Zambezi region.



3. PRODUCTION FORECAST 2024

This section covers the demand analysis, tonnages expected, hectares planted, expected average yield per hectare, the number of producers registered, and the white maize grain trade statistics for 2023 marketing season.

3.1 Expected production quantities and the domestic demand analysis

Figure 1 below shows the projected domestic production of white maize for 2024 and the respective domestic demand. The country is expecting a substantial production deficit of white maize for 2024. The harvest is expected for delivery to registered millers/silos as early as April 2024, and a total of **37 872** tons of white maize is projected to be readily available for the 2024 marketing season.

Whilst the average monthly demand for local white maize is estimated at **15,315** tons, the monthly projected harvest will not be sufficient to meet the monthly domestic demand. In April, a total of **11,821** tons is expected to be harvested, giving the country a grain deficit of **-3,494** tons. Similarly, during May (which is the beginning of white maize marketing season), a deficit of **-2,406** tons is expected, only **12, 909** tons is expected to be harvested. The country expects a merely 9,464 and 3,598 tons of maize in June and July, respectively.

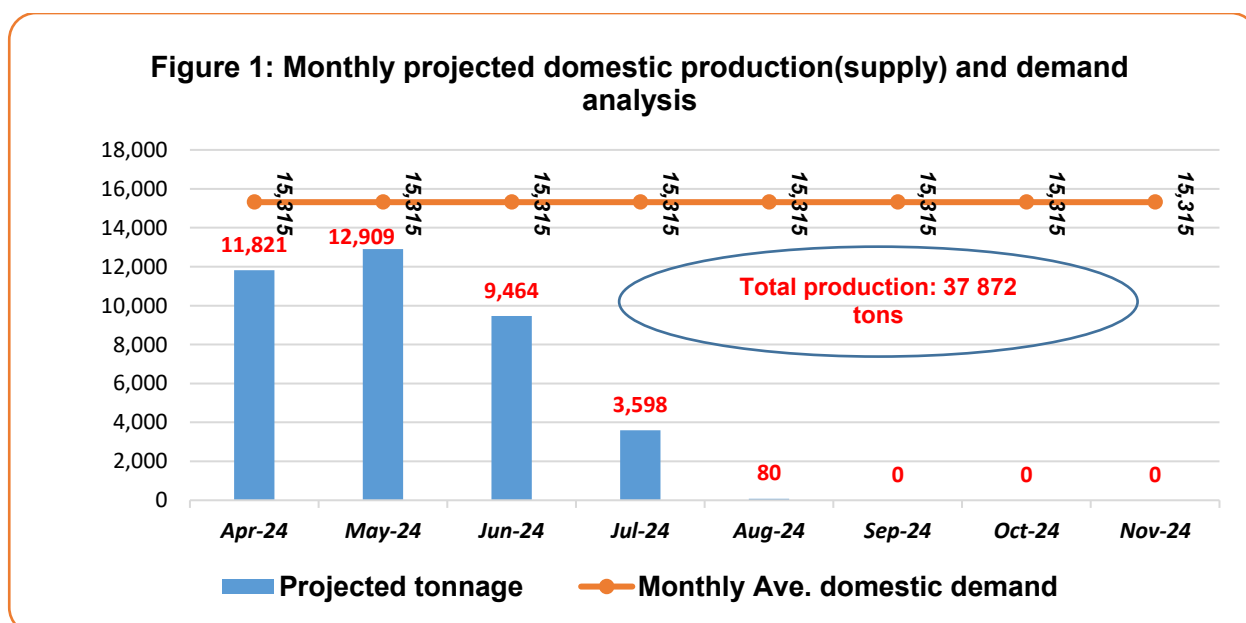


Figure 1: Monthly expected production and the average expected domestic demand

Therefore, to sustain the domestic demands, the border should remain open during the 2024 marketing season, with restricted importation of white maize to ensure that all the local produced grain is taken up by millers.

Figure 2 below, shows the expected volume of maize expected to be harvest monthly from each production zone. The highest volume is expected to be harvested only in April and May 2024, with the biggest volume coming from the Kavango and Karstland production zones of **5,356** and **6,807** tons respectively. A lower volume will be harvested during June/July toward August 2024.

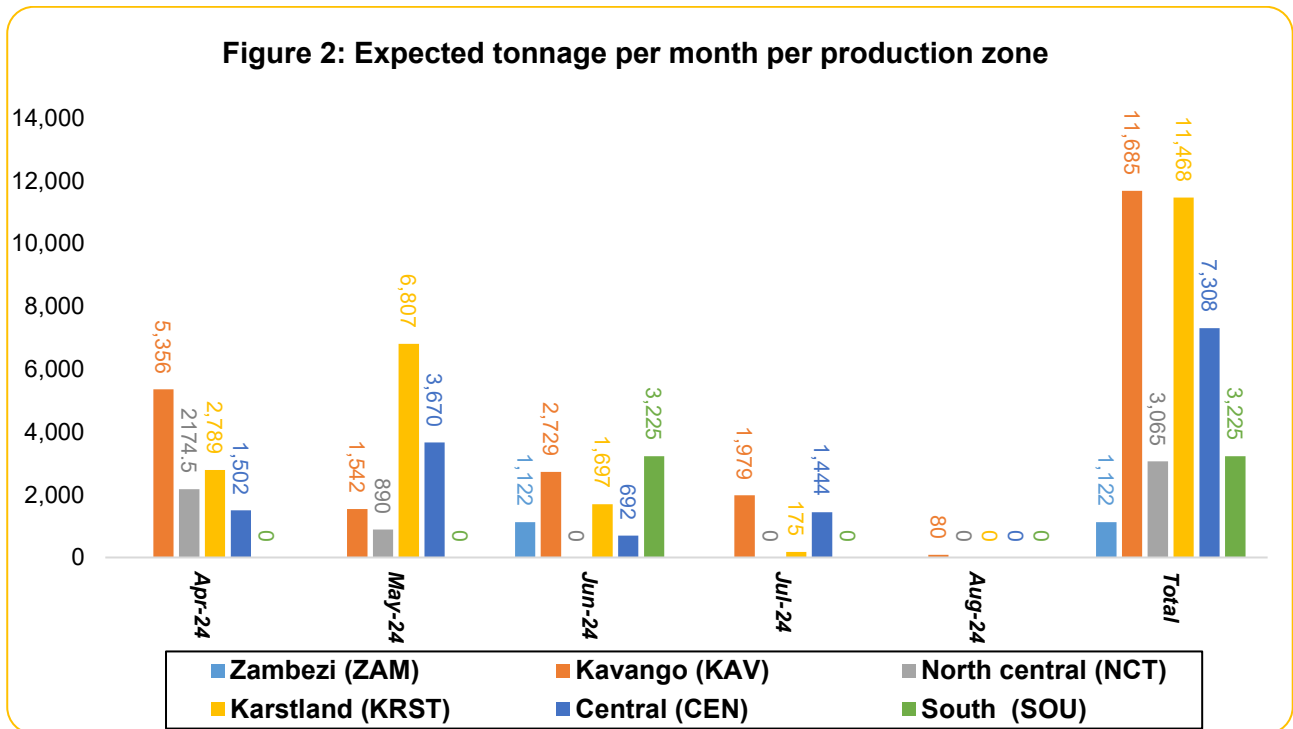


Figure 2: Expected tonnage per month per production area

Figure 3 below shows that the biggest volume in 2024 is expected to be harvested from the Green Scheme Irrigation Projects in the Kavango production zone (**11,685 tons**) representing 31% of the total tonnage expected in 2024, followed by the Karstland zone with **11,468 tons** (30%). The lowest tonnage is expected from the Zambezi area (**1,122 tons**) contributing 3% to the total tonnage expected in 2024.

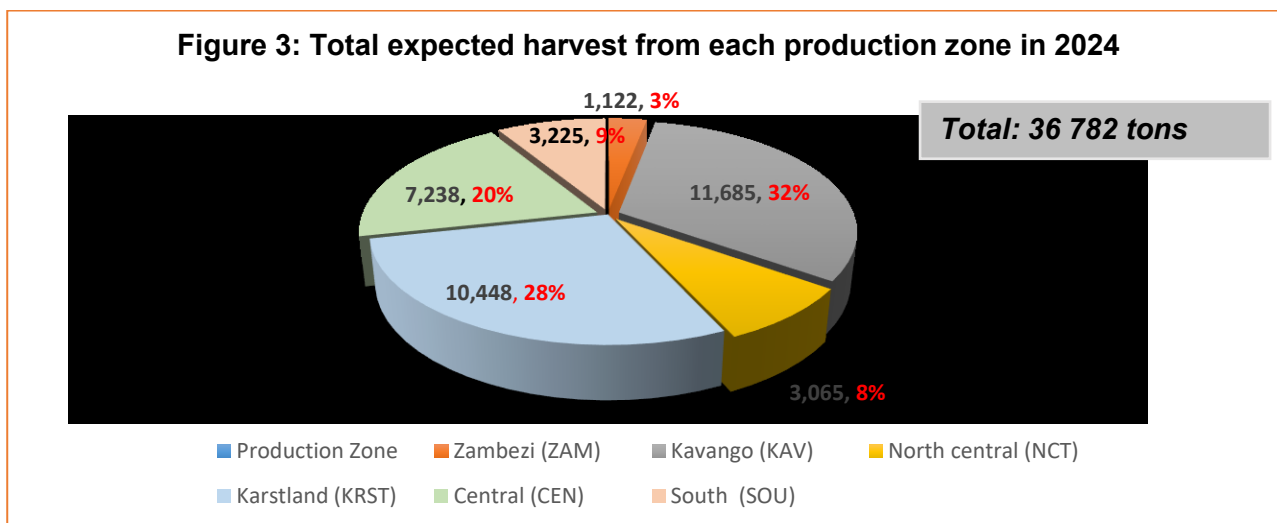


Figure 3: Total expected tonnage per production area 2024 production season

3.2 Expected tonnage from irrigated and rainfed production

Figure 4 below shows that the biggest tonnage of maize is expected to be harvested from the irrigated production (**35,898 tons**).

Rainfed production is heavily affected by the drought situation, and thus a total of 1,974 ton is expected to be harvested from the Zambezi (**1,121** tons) and Central production zone (**805** tons).

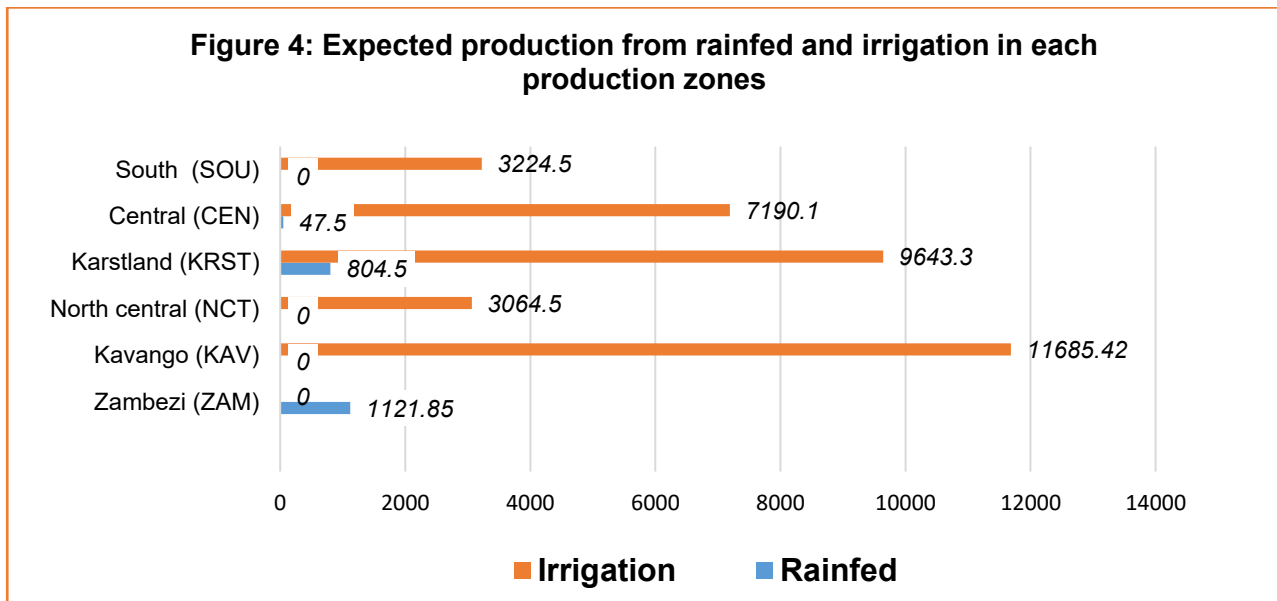


Figure 4: Expected tonnage from irrigated and rainfed production

Figure 5 below shows that out of the total **37,872** tons of white maize expected to be harvested and marketed during the 2024 season, **95% (35,897.74 tons)** is expected to be harvested from irrigated production, while a total of **6% (1,974 tons)** from rainfed production.

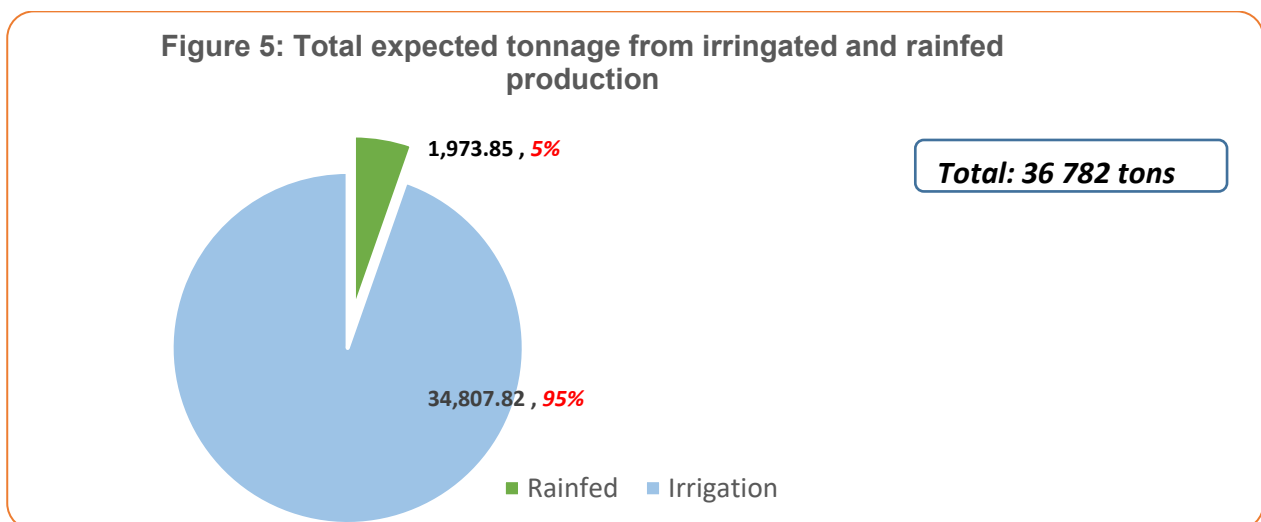


Figure 5: Total tonnage expected from irrigated and rainfed production

3.3 Hectares planted during 2024 planting season

Figure 6 below shows the total hectares to be harvested in 2024, both for irrigation and rainfed production in all the production zones. Kavango production zone planted the biggest hectares under irrigation (1,654 ha), followed by the Karstland and Central production zones with 1,040 ha and 774 ha respectively. In terms of rainfed, the Zambezi production zone recorded the highest hectares (2,121) planted under rainfed condition.

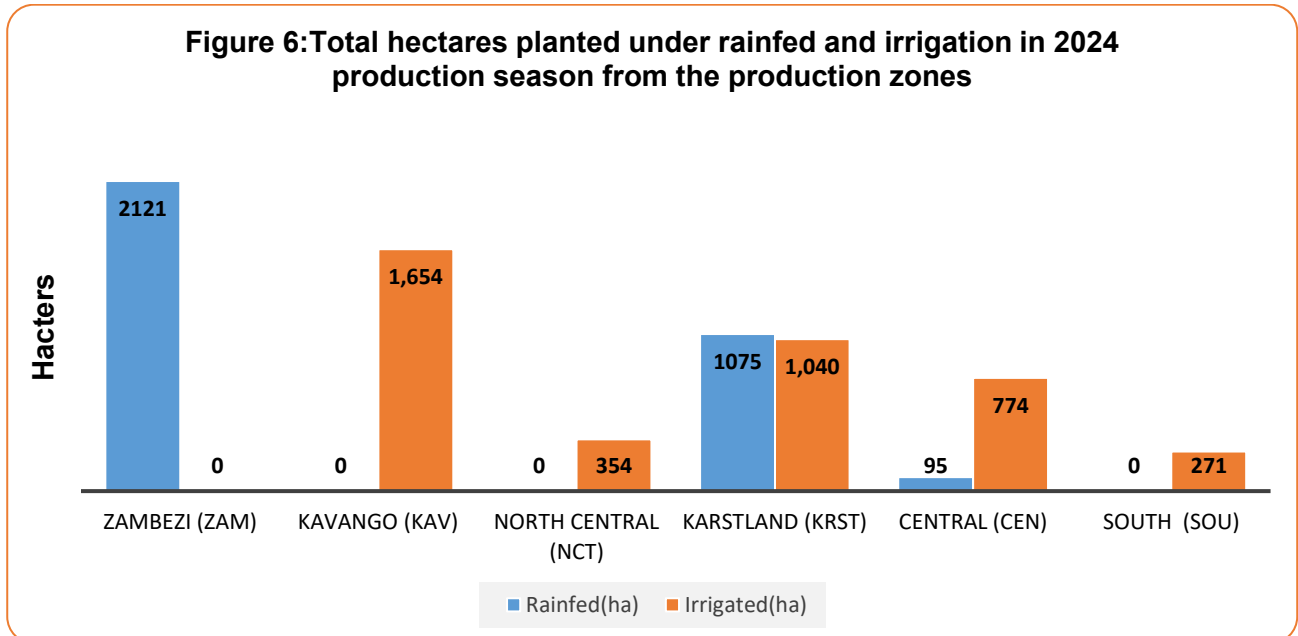


Figure 6: Total hectares expected to be harvested from irrigation and rainfed production in each production zone

Figure 7 below shows that a total of 7,382 ha was planted and will be harvested during 2024 marketing season, of which 4,091.70 ha (55 %) is irrigated, and 3,291 ha (45%) is rainfed.

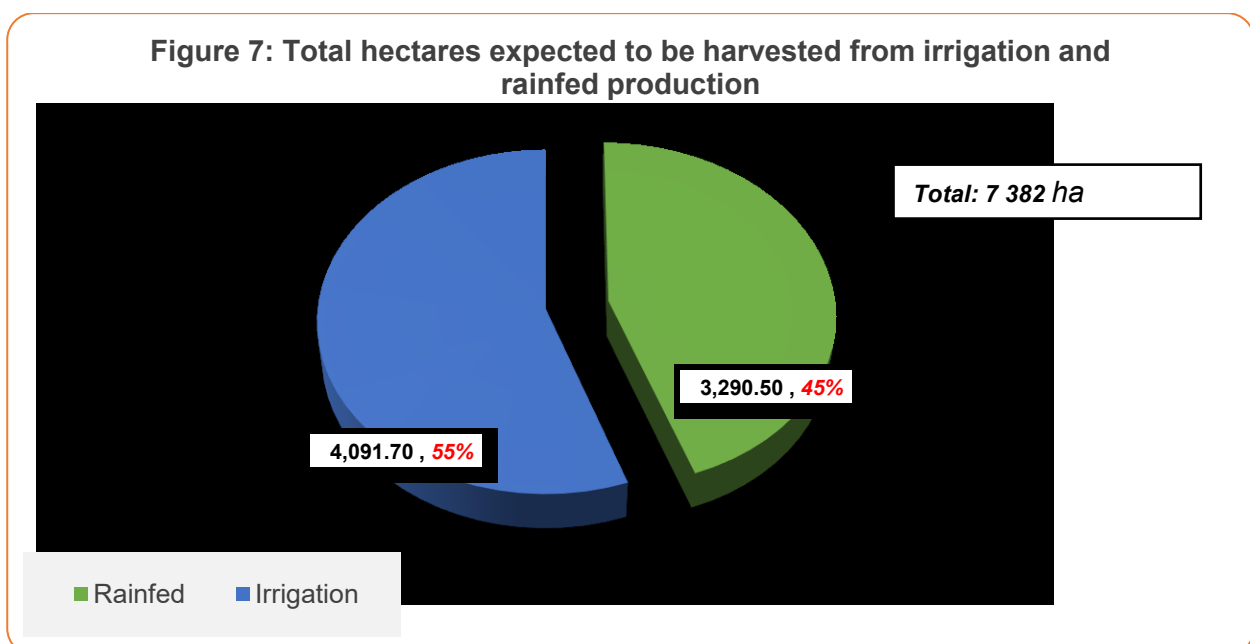


Figure 7: Total hectares planted under irrigation and rainfed production

3.4 Forecasted average yield per hectare

Figure 7 below shows the average yield expected to be harvested per hectare in each production zone during 2024. The highest average yield per hectare is expected from irrigated production, in the southern production zone (**12 t/ha**), followed by Karstland production zone (**10 t/ha**). The lowest yield per hectare under irrigation is expected from Kavango (**7 t/ha**).

As for the rainfed production, the highest expected average yield per ha will be **0.8 /ha** in the Karstland and the lowest of **0.5t/ha** in both the Central and Zambezi production zones.

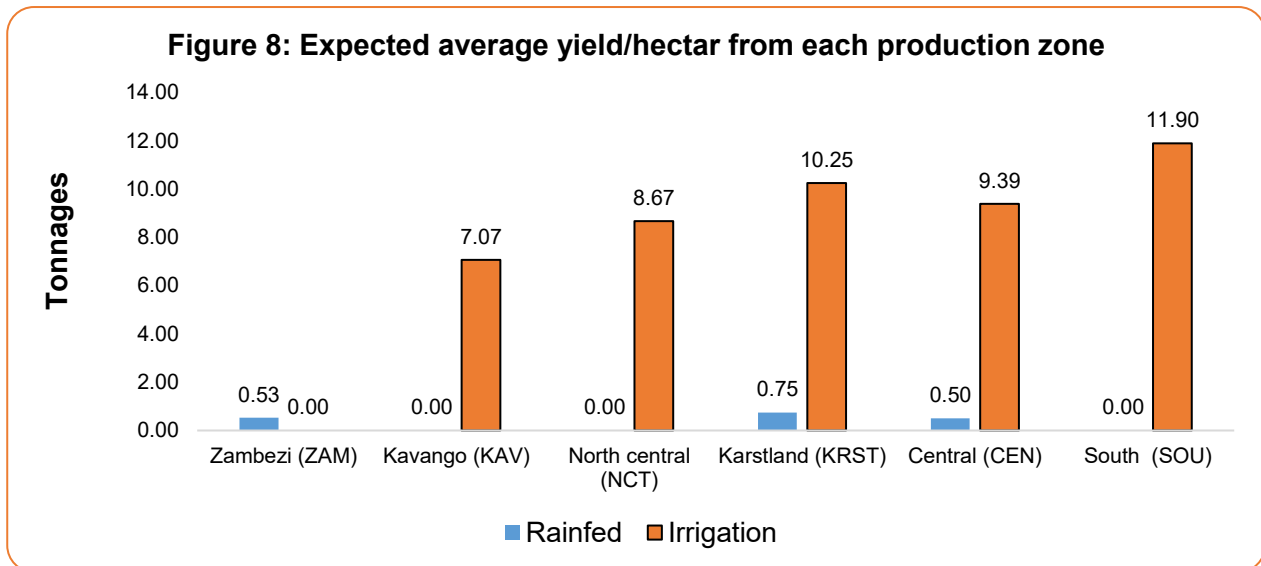


Figure 8: Expected average yield (tons\ha) for both irrigated and rainfed production

Figure 9 below shows that the national expected average yield per hectare from irrigated production is **9 t/ha**, and **0.6t/ha** from rainfed production during 2024 production year.

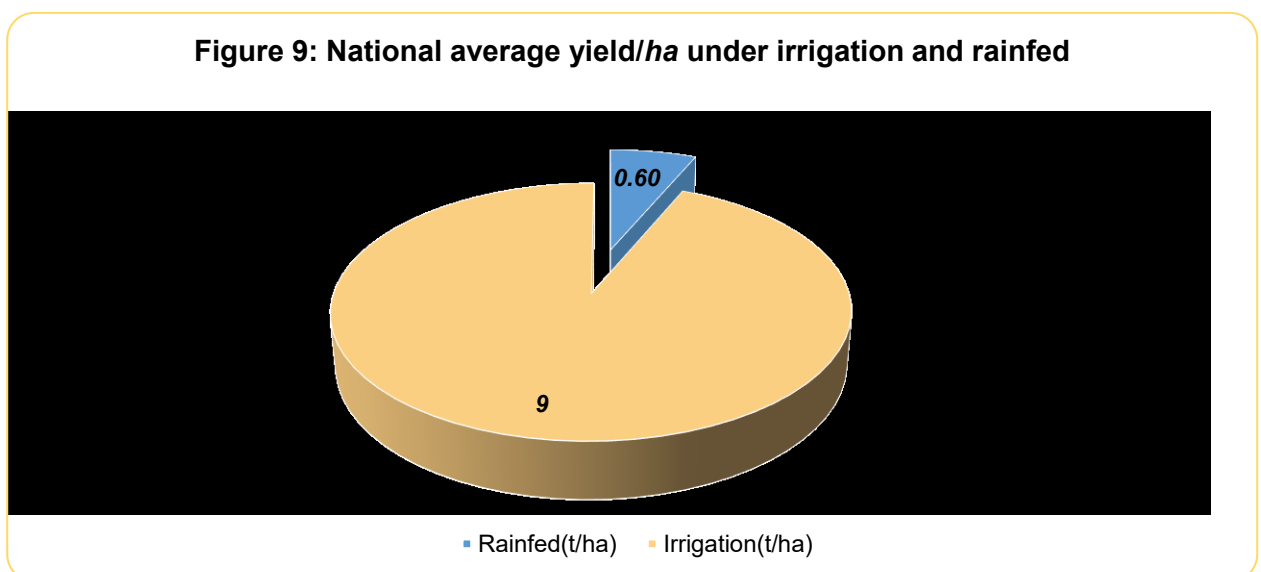


Figure 9: Total expected average yield per hectare (tons\ha)

4. COMPARISON OF TONNAGE AND HECTARES (2024 Vs. 2023)

4.1 Rainfed and Irrigated tonnage expected in 2024 vs. actual production in 2023

Figure 10 below shows the total tonnages expected to be harvested during 2024 as compared to the total tonnage marketed during 2023 marketing season. A total **67,118** tons was marketed in 2023 compared to **37,872** tons expected during 2024 marketing season, showing a substantial decline of **43.5%**.

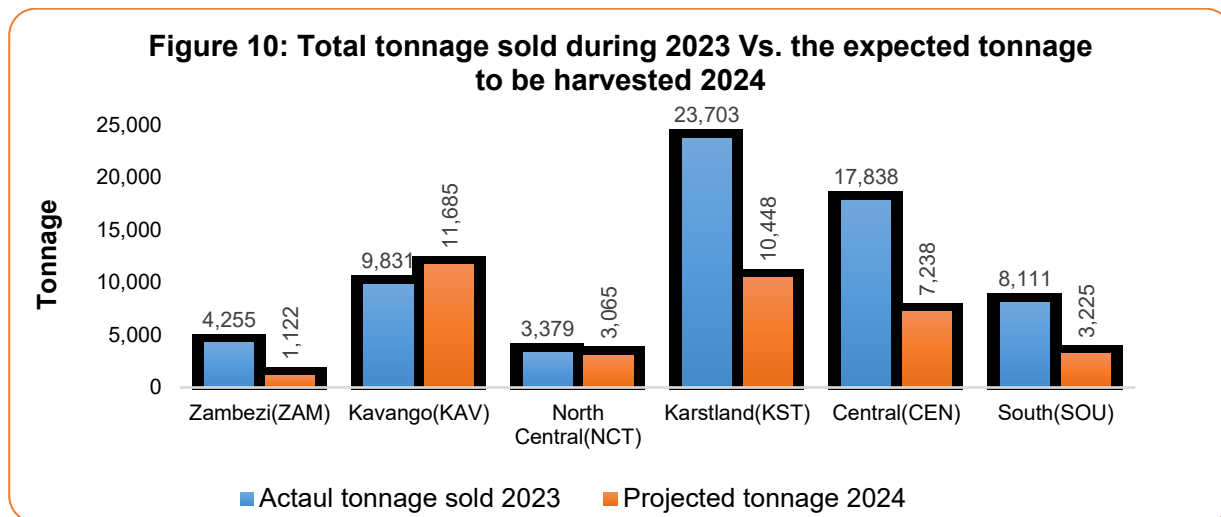


Figure 10: Rainfed tonnage – 2024 versus 2024

4.2 Rainfed and irrigated hectares planted in 2024 vs. 2023

Figure 11 below shows the total hectares planted in 2024 compared to the hectares planted in 2023 for both irrigation and rainfed production in all production zones. A total of **7,328** ha was planted during 2024 compared to a total of **35,857** ha planted during 2023, showing a substantial decline of **79%**.

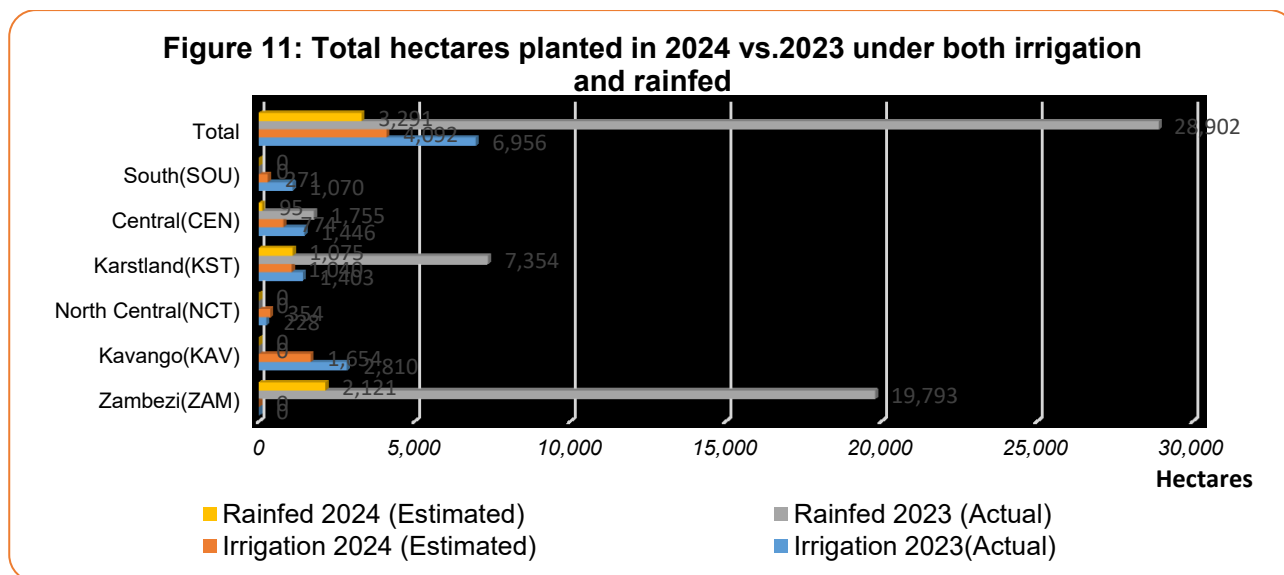


Figure 11: Irrigated and rainfed hectares planted in 2024 vs. 2023

5. OTHER GRAIN CROPS PLANTED DURING THE 2024 PRODUCTION YEAR

In light of the prevailing drought, and erratic rainfall, it was expected that grain farmers, under rainfall production will plant other grain crops as a strategy to mitigate risk, increase agriculture productivity and raise farmers income. Crops such as **Yellow maize, Groundnuts, Sunflower, Sorghum and beans** were planted in the land where white maize will be normally planted this year.

Figure 12 below, shows the expected harvest in tonnage for the non-controlled grain crops planted during 2024 planting season under both irrigation and rainfed production in each production zones.

A significant volume of Groundnuts is expected to be harvested amounting to **1,312 tons** with **1,092 tons** coming from irrigated production and only **220 tons** from rainfed production. Much of the groundnuts volume is coming from the Central production zone (**1,287 tons**) and very little is coming from Karstland (**25 tons**). A total of **590 tons** of yellow maize is expected to be harvested, while **580 tons** of Sorghum is also expected to be harvested this year. A total of **254 tons** of sunflower is expected to be harvested Karst (**224 tons**) and Kavango (30 tons) production zones.

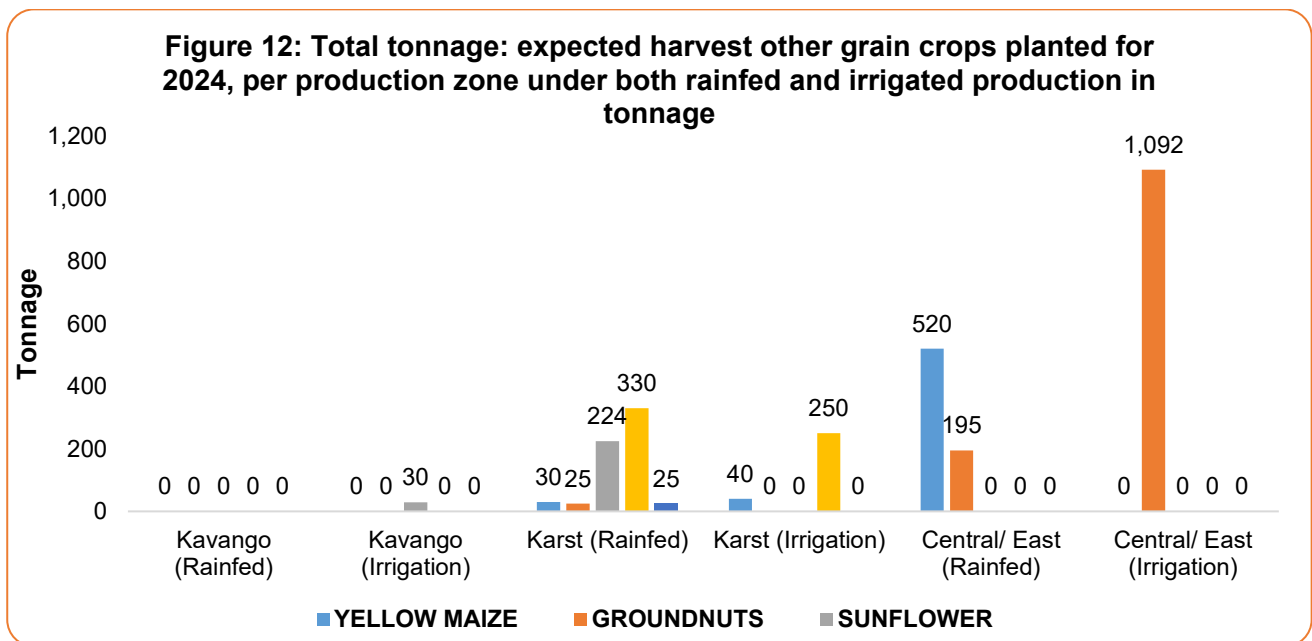


Figure 12: Expected harvest for other grains crops planted in 2024

Figure 13 below, shows the total hectares planted for each grain crop. Groundnuts is planted over the largest area of **577 ha** (with **447 ha** irrigated in the Central and **130 ha** rainfed in Karstland), followed by Sorghum planted over **270 ha** in total of which **160 ha** is rainfed in the Karstland.

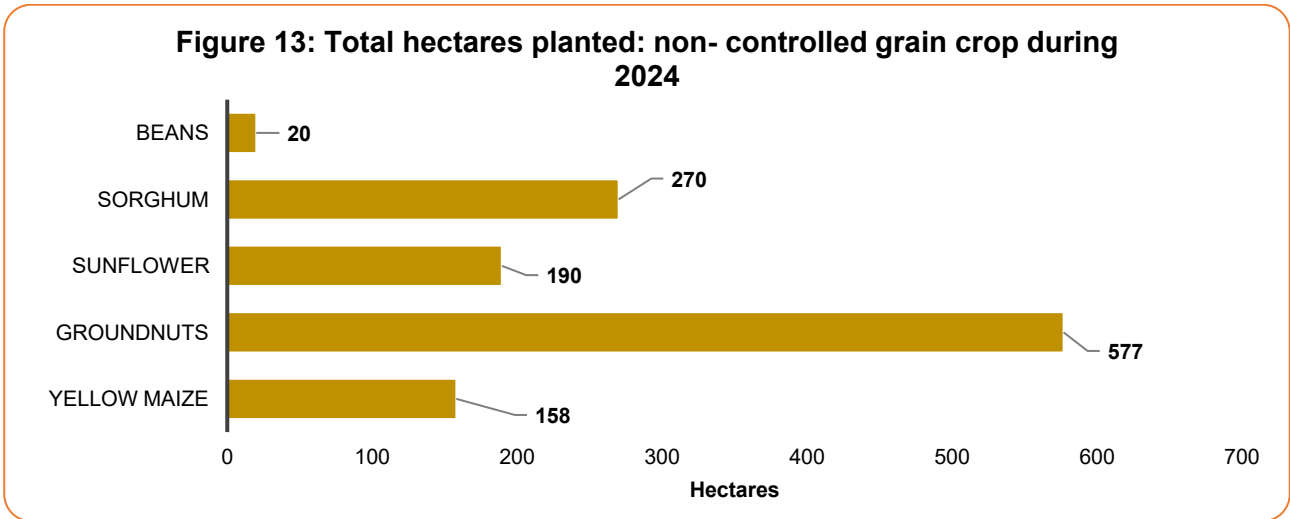


Figure 13, Total hectares planted for each crop in 2024

Figure 14 shows the average yield in tons/hectare under both irrigated and rainfed production. Yellow maize under irrigated production is expected to yield 8 t/ha compared to 3 t/ha expected under rainfed production.

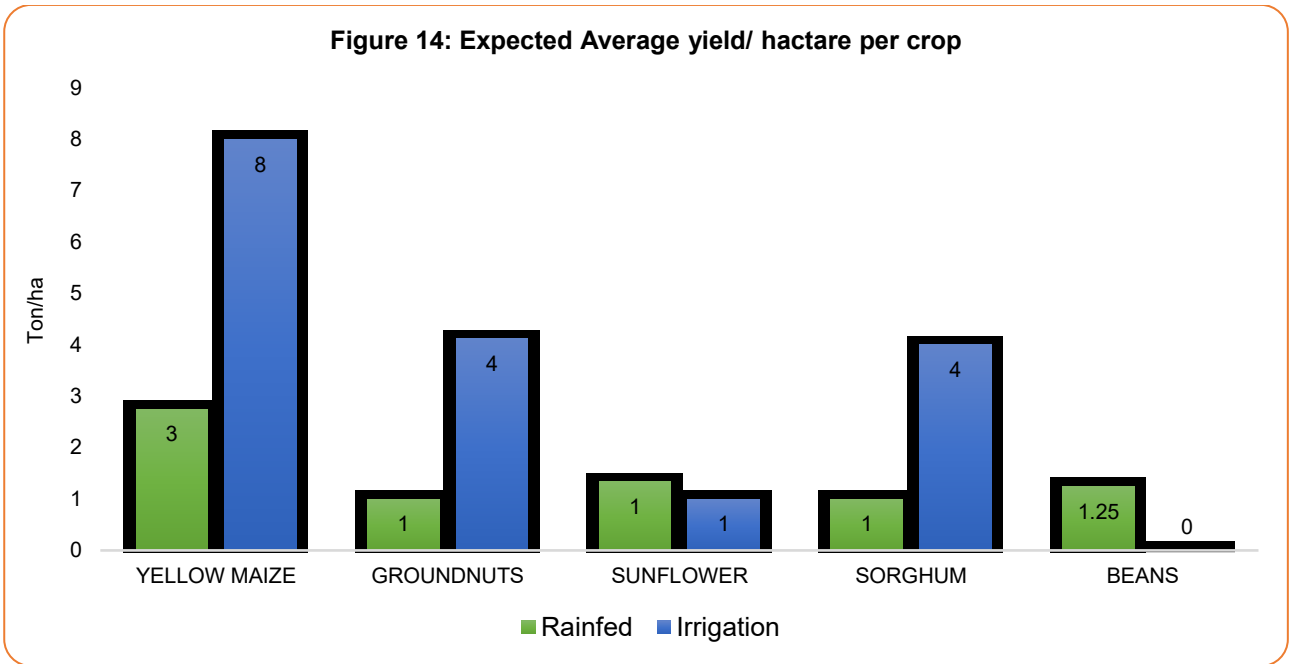


Figure 14: Average yield in tons/hectares

6. CONCLUSION

In conclusion, this report shows that the harvest of white maize expected during the 2024 marketing season from irrigated and rainfed production has significantly decreased by **43%**, compared to the white maize harvested during 2023 marketing season. This decline is due to the extreme drought experienced in all the production zones which led to a reduced yield per hectare and a substantial decline in the number of farmers who planted maize for 2024 compared to previous years.

Based on the domestic grain monthly demand of **15,315** tons, the local harvest in 2024 will be insufficient to meet the monthly demand during this marketing season which started on the 1st of May 2024. Therefore, to sustain the national demand of white maize grain, the border shall remain open for the importation of white maize into the country.

Furthermore, due to the erratic rainfall in the country, local farmers have moved away from the traditional crops and diversified with more resilient crops such as sunflower, Sorghum, Groundnut and Beans to mitigate against losses and increase their profit margin.

Notably, there is a potential for growing and developing the groundnut crop and its value-chain industry given the significant production forecast. A thorough market intelligence study will help in realizing this gap. Other grain crops such as yellow maize, sunflower, and sorghum also stand a profitable chance in the crop value chain hence constant monitoring of the production is required.

END