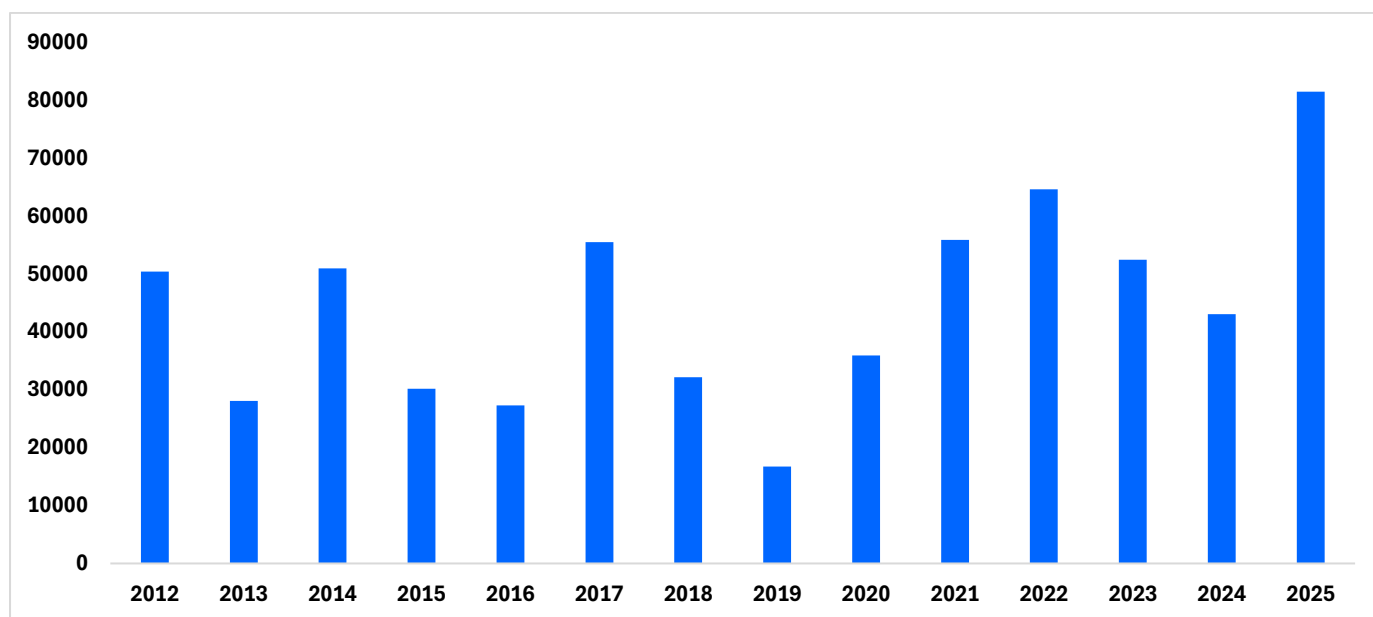


Climate & Rainfall Outlook

Namibia

Namibia's rainfall patterns over the years continue to reflect a growing degree of climatic volatility, marked by El Niño and La Niña events. The above-average rainfall performance recorded in 2025 is the highest annual total over the past 14 years, surpassing the previous peak of 64,591 mm in 2022, underscoring the country's potential recovery following favourable climatic conditions (Figure 1). The broader historical trend highlights heightened exposure to climate-related risks. These extreme climatic shifts reinforce the consummate need to urgently implement climate-resilient agricultural systems, expanding water storage and management infrastructure, and scaling up effective risk-transfer mechanisms such as agricultural insurance. The rising frequency and intensity of extreme rainfall outcomes continue to amplify vulnerability across the agricultural sector, water resources, and overall economic activity.

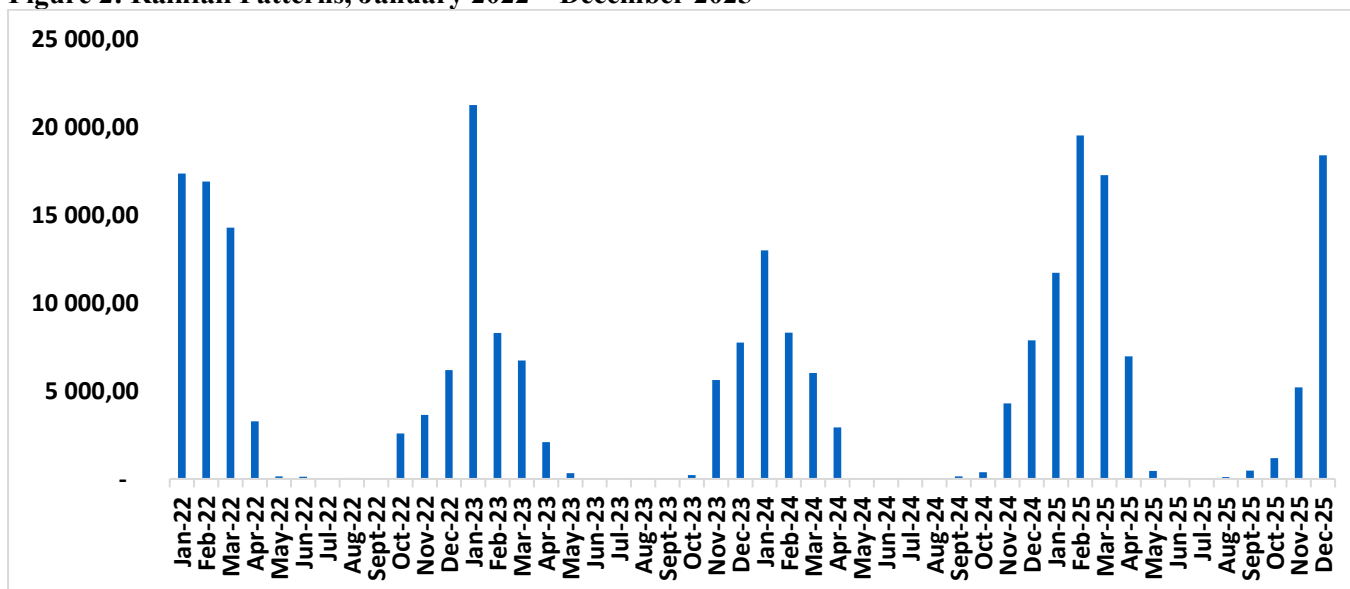
Figure 1: Namibia Annual Rainfall (mm)



Source: Namibia Meteorological Service & HEI Research

Rainfall distribution in Namibia remains highly seasonal, with the bulk of precipitation consistently concentrated between January and March, while the period from May to September records persistently low to near-zero rainfall levels (Figure 2). This entrenched seasonality confirms Namibia's heavy dependence on the summer rainfall season, rendering agricultural production, rangeland conditions, and dam levels particularly sensitive to the timing, intensity, and spatial distribution of rainfall. Delays in the onset of rains, prolonged dry spells within the season, or an early cessation of rainfall during this critical window continue to pose significant downside risks to crop yields, livestock productivity, and rural livelihoods.

Figure 2: Rainfall Patterns, January 2022 – December 2025

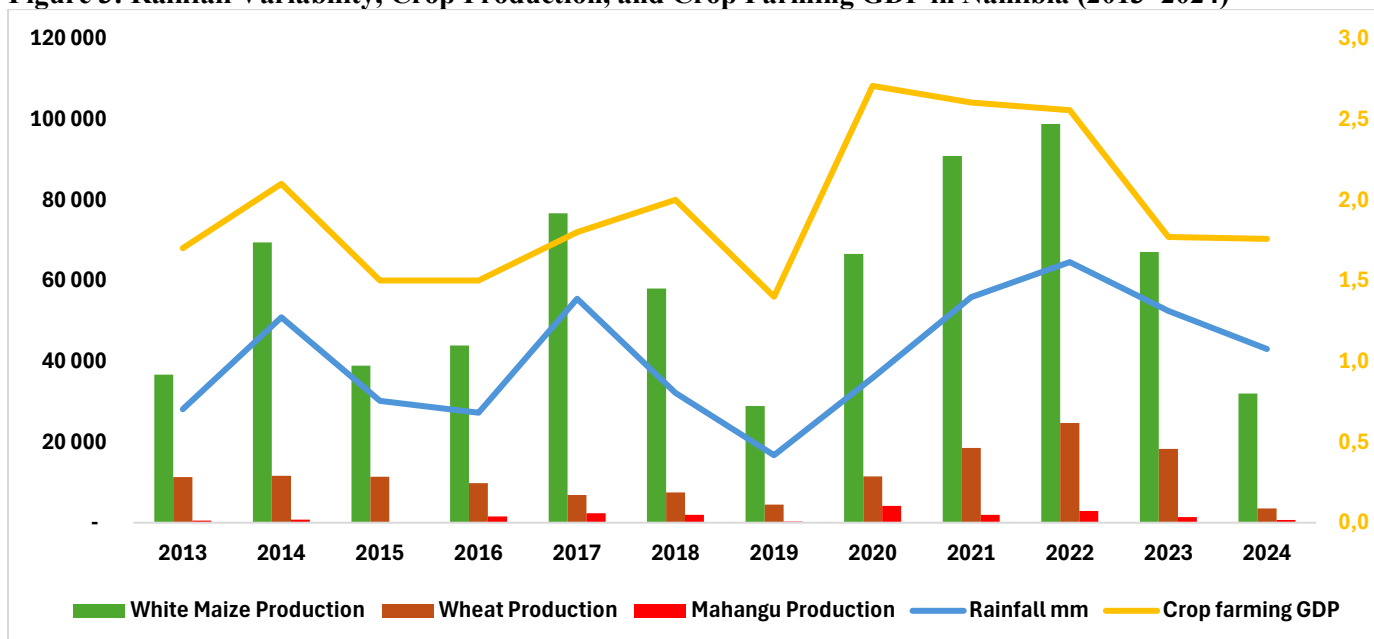


Source: Namibia Meteorological Service & HEI Research

The notable rebound observed in 2025 characterised by robust rainfall early in the year and again toward year-end signals a markedly improved short-term outlook for crop production, rangeland regeneration, and rising dam water levels. This recovery presents a critical opportunity to rebuild agricultural assets and replenish water reserves, even as underlying climate risks remain elevated. Against this backdrop, strengthening climate adaptation and resilience measures remains imperative. A wider adoption of climate-smart agricultural practices, enhanced early-warning systems, and scalable agricultural insurance solutions will be central to mitigating future climate shocks. As rainfall outcomes become increasingly erratic, proactive risk management will be essential to safeguarding Namibia’s long-term agricultural sustainability and broader economic resilience.

Namibia has experienced persistent drought conditions, which led to the government to declare national emergencies during 1992/1993, 1995/1996, 2012/2013, 2013/2014, 2015/2016, and 2018/2019. By the end of 2019 the worst drought recorded in 90 years resulted in reduced agricultural output, significant herd losses, and an increased reliance on imports and drought relief measures. Namibia’s rural population remains the most exposed to drought shocks, given its heavy dependence on crop and livestock production.

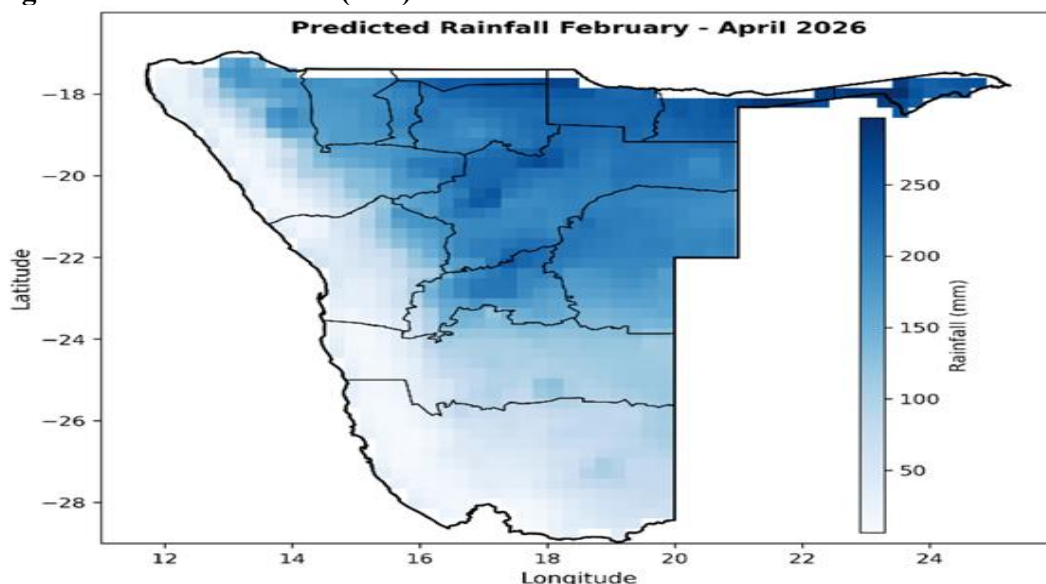
Figure 3: Rainfall Variability, Crop Production, and Crop Farming GDP in Namibia (2013–2024)



Source: Source: Namibia Meteorological Service, Namibia Agronomic Board & HEI Research

The data show that there is a close linkage between rainfall variability and crop production outcomes, particularly for rain-fed staple crops such as white maize, wheat, and mahangu. Improved rainfall conditions have coincided with strong rebounds in crop production and a higher contribution of crop farming to GDP. Conversely, severe drought conditions have been associated with sharp contractions in production and reduced GDP contributions, with 2019 reflecting the lowest rainfall levels and the weakest crop-farming performance, as GDP fell to 1.4% (Figure 3). While the directional relationship between rainfall, production, and GDP is evident, changes in GDP contribution are less pronounced than fluctuations in production volumes, indicating that agricultural GDP is partially buffered by price effects, imports, and broader macroeconomic dynamics. Overall, rainfall remains a critical underlying driver of agricultural performance and income generation in Namibia, even as its GDP impact is partially moderated by structural and market factors.

Figure 4: Annual Rainfall (mm)



Source: Namibia Meteorological Service & HEI Research

According to the Namibia Meteorological Service December 2025 Climate Watch, normal rainfall conditions are expected over Kavango East, southern Otjozondjupa, northern Khomas, and eastern Karas regions during the February to April 2026 period. The bulk of the country are projected to receive above-normal rainfall, as indicated by the blue-shaded areas in Figure 4 above.

Table 1: National Dam Level at 02/03/2026

Dam Grouping	Dams	Present Volume (Mm3)
Major Dams	Neckartal, Hardap, Naute	1097.829
Central/Other Dams	Swakoppoort, Von Bach, Omatako, Olushandja, Oanob, Friedenau, Otjivero Main, Dreihuk, Tilda Viljoen, Otjivero Silt, Daan Viljoen	154.976
Empty Dams	Bondels, Omaruru Delta, Omatjenne	0
TOTAL		1252.805

Source: Namibia Water Corporation Ltd

According to the latest weekly dam bulletin issued by NamWater, Namibia’s national dam storage levels stood at 80.5% as of 02 March 2026, indicating a generally favourable water supply position following improved rainfall conditions. Storage levels at major dams such as Neckartal Dam (864.695Mm³; 100.8% of capacity), Naute Dam

(68.805 Mm³; 82.3%), and Swakoppoort Dam (50.980 Mm³; 80.3%) remain high, supported by continued inflows in key catchment areas. Central supply dams, including Von Bach Dam, recorded moderate levels at 34.030 Mm³ (71.6% of capacity), despite slight week-on-week drawdowns observed over the week (Table 1). However, uneven recovery across dams reinforces the importance of continued prudent water management, infrastructure maintenance, and the strategic use of both surface and groundwater resources. Sustaining these storage levels will remain closely tied to rainfall performance during the remainder of the rainy season and effective demand management going forward.