



## SECTOR BRIEF NAMIBIA: **Agriculture**



### Overview

The Republic of Namibia is an arid country in south-western Africa with a total land area of 824,268 km<sup>2</sup>. Its capital and largest city is Windhoek. Namibia is a multilingual country with English as the official language. Afrikaans and German are the most widespread Indo-Germanic languages. About 30,000 Namibians are of German origin.

Namibia is the driest country in Sub-Saharan Africa and depends largely on groundwater. Only 2% of Namibia's land receives sufficient rainfall to grow crops. Low and variable rainfall and the inherently poor soils are major obstacles to optimum agriculture production. As all inland rivers are ephemeral, irrigation is only possible in the valleys of the border rivers Orange, Kunene, and Okavango. As a result, less than 1% of the entire land area is suitable for arable farming.

### Sector overview: Agriculture

Agriculture is one of Namibia's most important sectors: Around 70% of the country's population depends directly or indirectly on agriculture for their income and livelihood, mostly in the subsistence sector.<sup>1</sup> However, the country's arid climate and geographic conditions do not favour farming and the crop variety is rather limited. Major crops include maize, millet and sorghum.

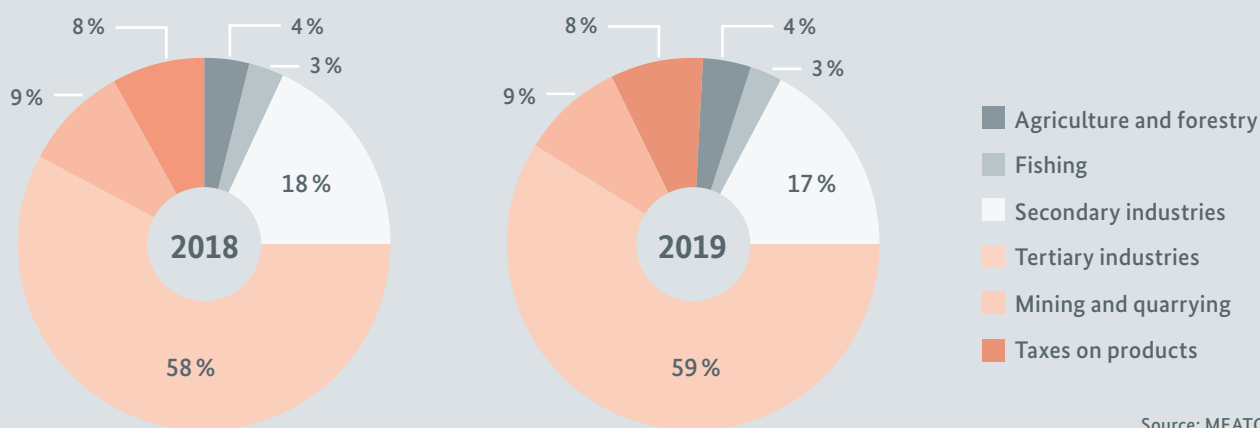
There are mainly two types of farming in Namibia, namely commercial farming and subsistence farming. The country's commercial agricultural sector is complemented by a large informal sector characterised by subsistence farming. The commercial sector covers about 44% of the total land, though it accommodates only 10% of the population. The communal sector covers 41% of the total land area and accommodates about 60% of the population. Agricultural production – and subsequently income – is low in the subsistence sector for a number of reasons, including limited access to markets or also high-quality seed inputs which work well under drought conditions.

The livestock sector is productive and export oriented. Beef accounts for the largest share of livestock exports. Fishing is another important component of the primary sector, as Namibian waters are rich in fish.

The agricultural sector is one of the largest employers. Its contribution to GDP (excluding fishing) over the last five years has been just over 4%, in 2019 even 6.6%. Livestock farming contributes to approximately two-thirds of agricultural production, with crop farming and forestry making up the remaining third. Meat processing (which is classified as manufacturing by the Namibian government) contributes to another 0.2% to 0.4% of GDP.

<sup>1</sup> Information in this sector brief as of November 2020

### Sector contribution to GDP



Source: MEATCO (2020)

Import and export of agricultural products play an integral role in Namibia. 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.

Outputs from the agricultural and fishing industries form a significant part of Namibia’s continental and international trade. At the same time, the country is a net importer of several consumable products.

South Africa is Namibia’s largest import partner, and food products account for most of those imports. This is (in large parts) due to the dry climate which has been exacerbated by minimal rainfall in recent years. Cereals such as wheat, millet and sorghum are staples of the national diet. While these crops are locally produced, imports are necessary to meet national demand. Other important import partners include the Netherlands, Germany, the Russian Federation and Morocco.

Net Exports 2017/18	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
<b>Total</b>	<b>5.77 billion</b>	<b>331.4 million</b>

Source: MEATCO (2019)

The export of live animals, mostly cattle and sheep, has historically contributed to about two-thirds of agricultural exports by value. In 2019, Namibia exported about 12,400 metric tons of meat. Most meat is exported to the United States, Europe, South Africa, and China. Livestock farming remains an important foreign exchange earner for Namibia.

Animal products, live animals, and crop exports constituted roughly 10.7% of total Namibian exports in 2019. The government encourages local sourcing of agriculture products. Retailers of fruits, vegetables, and other crop products must purchase 27.5% of their stock from local farmers.

Net Imports 2017/18	NAD	EUR
Poultry	850 million	48.8 million
Grains	408 million	23.4 million
Vegetables	211 million	12.1 million
Dairy	141 million	8.1 million
Pork	124 million	7.1 million
<b>Total</b>	<b>1.73 billion</b>	<b>99.5 million</b>

Source: MEATCO (2019)

One of the fastest growing areas of economic development in Namibia is the growth of wildlife conservancies.

## Agricultural products and production

The agricultural sector in Namibia comprises of both crop farming and livestock farming.

### Livestock

Livestock farming continues to dominate the sector by contributing approximately two-thirds of agricultural production. The commercial livestock farming sector in Namibia is well developed, capital-intensive and export oriented. Cattle raising is predominant



in the central and northern regions, while sheep and goat farming are concentrated in the more arid southern regions. Subsistence farming is mainly confined to the “communal lands” of the country’s populous north, where roaming cattle herds are prevalent. Live-stock from the northern parts of the country cannot be exported or traded to the southern parts due to the veterinary fence, also known as the red line, that prevents pest-exclusion.

The poultry sub-sector has grown significantly in the past few years and has become the second most important sub-sector in 2019 worth 1.05 billion NAD of annual revenue. Imports of frozen chicken portions are limited to 1,500 tonnes a month. Around 1,900 tonnes of the monthly demand of 2,500 tonnes for broilers are produced locally.

Ostriches are farmed in the drier parts of the country. Dairy farming, game farming, trophy hunting and pig farming are other important agricultural sub-sectors.

### Agronomy and horticulture

Despite its arid and semi-arid climate, Namibia is able to produce a variety of crops ranging from cereals, fruits and horticulture products. The horticulture covers fresh agricultural produce including tomatoes, potatoes, carrots, cabbage, butternuts, beans and groundnuts, dates, grapes, watermelons, melons, citrus and others under irrigations. Cereals crops include maize, pearl millet (mahangu), wheat and sunflower. The most productive vegetable exported to South Africa and Angola is onions.

Although this sub-sector has expanded significantly over the past decade, Namibia produces only 35% of its vegetables, largely as a result of the seasonality of crop production. Less than 4% of the annual demand of 730 tonnes of fruit is produced locally.

In December 2018, the Namibian Agronomic Board increased the market share promotion (MSP) from 44% to 47%, meaning that importers of fresh produce must now buy 47% from local producers before they can obtain a permit to import the remaining 53%. The increase is expected to generate an additional income of 20 million NAD (approximately € 1,15 million) for local producers.

### Fishing and marine aquaculture

The fishing industry is considered a separate sector in Namibia, but it is often mentioned together with agriculture and forestry to highlight the two sectors’ combined impact on the economy.

The Benguela marine ecosystem is one of the most productive fishing grounds in the world and Namibia’s marine fisheries industry ranks among the top in Africa. The rich fishing waters off the coast support seven main commercially exploited species, as well as a variety of others that are landed in smaller volumes. Commercial fishing, including fish processing, is the fastest-growing sector of the Namibian economy in terms of employment, export earnings, and contribution to GDP. The industry is the third largest contributor to the GDP and the country’s largest export earner after mining.

The main species found in abundance off Namibia are pilchards (sardines), anchovy, hake, and horse mackerel. There also are smaller but significant quantities of sole, squid, deep-sea crab, rock lobster, and tuna. Walvis Bay, the hub of the fishing industry, accounts for around 90% of the landings, while Lüderitz is the centre of the rock lobster, swordfish and tuna industries. Smaller catches of hake are also landed at that southern port.

### Charcoal

Namibia has a well-established charcoal sector, which ranks among the top wood charcoal exporters in the world. Charcoal production is an important activity for managing bush encroachment while simultaneously restoring rangeland. Charcoal exports have increased from 10.3% in 2018 to 16.8% in 2019 of total agricultural exports. Namibia is ranked number six out of fifteen countries that exported the highest dollar value worth of charcoal during 2019. This also makes the country the largest exporter of charcoal in the Southern African region. The charcoal value chain is well organised and the bush harvesting process is firmly regulated.



Charcoal produced from Namibian encroacher bush

### Agro-processing

Agro-processing falls within the manufacturing sector but has a close relationship to the agriculture sector. The agro-processing industry is demarcated into upstream and downstream industries. Upstream industries are considered the processors of agricultural raw materials into preliminary products. Major upstream agro-products are derived from the livestock sub-sector in Namibia. They include among others processed meat (chilled, frozen, dried and canned), milk and dairy products and leather tanning. Crop production constitutes another important source of inputs for upstream agro-processing activities. These activities include the milling of maize, mahangu and wheat; grinding groundnuts into peanut butter, oil pressing from plant seeds, and juice pressing from fruits.

During downstream industries, the upstream products that were made from agricultural materials, are processed further. This is where most of value addition takes place. Activities include baking bread and biscuits, cereal and pasta production, textile spinning, paper production, beer brewing, and clothing and footwear manufacturing.

The agro-processing sector has a strategic importance for employment, income generation and value addition due to its close links to the agricultural sector. Only very few agro-processed products are exported. The country is a net exporter of unprocessed agro-products, especially from the livestock sub-sector. On the other hand, the country relies heavily upon imports of food products. Most imports come from South Africa and the European Union Member States.

## Legal, political, institutional and regulatory framework

The Government of the Republic of Namibia is guided by long-term development objectives as outlined in National Development Plans (NDPs) and Vision 2030 strategy. The mandate of the Ministry of Agriculture, Water and Land Reform is the promotion, development, management and utilisation of agricultural, water and forestry resources. It is therefore the objective of the Government to ensure agriculture productivity and food security in line with Vision 2030. The desired outcome for the agricultural sector and food security in Namibia's Fifth National Development Plan (NDP5) is to reduce the proportion of food-insecure individuals from 25 % in 2016 to 12 % and to increase food production by 30 % cumulatively between 2017 and 2022.

## Agricultural policies

A number of policies affect land and agriculture in general.

These include the following:

- National Agriculture Policy (NAP)
- Green Scheme Policy
- Agriculture Marketing and Trade Policy Strategy
- National Drought Policy and Strategy
- Namibian Horticulture Market Share Promotion (MSP) Scheme
- Agricultural Bank of Namibia Act (Act No. 5 of 2003)
- Harambee Prosperity Plans (HPP) I and II

## Land reform

Land reform is an important political and economic topic in Namibia. The government's land reform policy is shaped by two key pieces of legislation:

- The Agricultural (Commercial) Land Reform Act 6 of 1995
- The Communal Land Reform Act 5 of 2002



Farming at the Otjejekua Farmers' Cooperative in the Kunene Region

The government remains committed to a "willing seller, willing buyer" approach to land reform and the provision of just compensation as directed by the Namibian constitution.

The land reform policy consists of two different strategies:

- Resettlement
- Transfer of commercially viable agricultural land

Resettlement aims to improving the lives of displaced or dispossessed previously disadvantaged Namibians. Farms obtained by the government for resettlement purposes are usually split into several sections, and dozens of families are being resettled on what had previously been one farm. The transfer of commercial agricultural land is not directly conducted by government. Would-be farmers with a previously disadvantaged background obtain farms privately or through affirmative action loans. In both cases, the "willing seller, willing buyer" principle applies.

## Renewable energy in agriculture

Forward-looking, sustainable agriculture relies on a delicate balance of maximising productivity and maintaining economic viability, while minimising the utilisation of finite natural resources and detrimental environmental impacts. The use of renewable energy in agricultural processes can contribute to balancing these objectives. More precisely, a high level of integration of renewable energy can lead to high efficiencies, lower environmental impact and lower production costs – especially considering the fact that electricity prices are fairly high and that Namibia is currently importing more than 60 % of its energy.

In the country, the use of renewable generated energy (electricity and heat) in agriculture and food processing in particular applies to:

- Photovoltaic driven pumps for irrigation;
- Powering of grinder, mills and cold storage facilities; as well as
- Heat for drying, thermal cooling systems and other processes.



Due to the Namibian irradiation values, which clearly stand out in African comparison and are also among the highest in the world, solar energy in particular offers excellent potential for application. The annual solar irradiation reaches values of up to 2,200 kWh/m<sup>2</sup>. Due to the constantly high irradiation, photovoltaic (PV) systems in Namibia generate twice the amount of electricity on an annual average as comparable systems in Germany. Per kWp of installed PV capacity, a daily yield of up to >5.6 kWh can be expected.

Especially in northern Namibia, the use of invasive bush wood (encroacher bush) offers potential for the use of bioenergy. The bush encroachment affects approx. 45 million hectares and approx. 18 million tons could be harvested in a sustainable manner. The energy content of dried bush wood is about 3,300 kcal/kg.

Biogas from agricultural and food industry residues offers additional potential for renewable energy generation, albeit to a limited extent. However, due to water shortages and demand for land in food production, bioenergy from specially cultivated energy crops is not permitted. Other renewable energy technologies, like wind or hydro-power, are not of relevance in the context of agriculture in Namibia.

The tariffs for grid-power in Namibia in general support the viable application of renewable energy, photovoltaic in particular. The wholesale electricity tariff (regional electricity suppliers, municipal utilities, large industrial consumers) stands at 1.71 NAD/kWh (approx. 0.10 EUR/kWh) in 2020/21. The actual electricity costs for end customers are significantly higher than the wholesale electricity tariff, as there is a surcharge for the costs and margins of the

24 regional electricity suppliers and municipal utilities. In addition, seasonal and time of use electricity price fluctuations apply. As a result, Namibia has the highest electricity prices within the Southern African Development Community (SADC) region.

## Organic agriculture

The interest in organic agriculture is on the rise in Namibia. An influential group of Namibians is at the forefront of intensified efforts to keep farming practices and products as natural as possible.

The Namibian Organic Association (NOA), is a membership-based association of farmers, consumers and other organisations, with the aim of developing the organic sector in the country. The Association has developed the Namibian Standards for Organic Production and introduced a Participatory Guarantee System (PGS) to assess producers that gives an organic guarantee to Namibian consumers. The Organic Mark can be used by growers certified through the PGS, while third-party certifiers can operate alongside the PGS. Third-party certification is primarily used for export markets.

Organic agricultural methods are internationally regulated and legally enforced by many nations, based in large part on the standards set by the International Federation of Organic Agriculture Movements (IFOAM), an international umbrella organization for organic farming organizations. The Namibian Organic Association is affiliated with IFOAM. The Namibian Standard was developed in line with a standard compliant with the IFOAM Standard, which



Urban Horticulture in Outapi, Omusati Region

facilitates an easy migration of PGS-certified farmers to third-party certification when and if required. The Namibian Nature Foundation (NNF) and Namibian Organic Association (NOA) launched the Namibian pilot of a continental project to promote organic agriculture in the country with funding from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and support from South Africa's Sustainability Institute early in 2020.

The project aims to develop organic knowledge hubs across the continent, with pilot GIZ funded projects run in Namibia, Zambia and South Africa in Southern Africa, as well as in East, North and West Africa. These hubs will gather and share knowledge on organic agricultural practices to support small-scale farmers in growing yields of high-nutrition crops and protecting biodiversity to help improve adaptive capacity to the effects of climate change. The project also enables new trade opportunities for small-scale farmers in the organic sector.

## Smart farming

Smart farming is a management concept focused on providing the agricultural industry with the infrastructure to leverage advanced technology for tracking, monitoring, automating and analysing operations. These technologies include big data, clouds and the internet of things (IoT), robotics, drones and sensors. Also known as precision agriculture, smart farming is software-managed and sensor-monitored.

These latest technologies, especially IoT, do not only provide a better way to measure and control growth factors, like irrigation, water, and soil conservation but they also limit the use of fertilizers on a farm to the bare minimum requirements and change how agriculture is viewed in its entirety.

Due to Namibia's extreme climate challenges, the country needs to adopt agricultural practices that strengthen the resilience to climate change and variability to ensure food and livelihood

security of its increasing population. This could be done through climate smart agricultural technologies (CSA). CSAs are adaptation options that can sustainably increase productivity and enhance resilience to climate change whilst reducing greenhouse gas emissions. CSA options generally integrate traditional and innovative practices, technology and services that are relevant to a particular location.

Technologies such as hydroponics, aquaponics, improvement of crop production under saline conditions, introduction of alternate food crops like mushrooms, domestication of desert plant species and use of renewable energy in agriculture are all forms of CSA. More examples of CSA practices and approaches in Namibia are:

- Conservation agriculture,
- Use of hybrid seeds,
- Smart irrigation.

## Business activities in the Namibian agricultural sector

Namibia's economy consists of a small local market. There is also a focus on certain industries. Nonetheless, the country holds the potential to become a regional trade hub – with the port of Walvis Bay and Lüderitz as well as the Walvis Bay Corridors which are positioned to give Namibia a competitive edge as a transport hub for all regional and international trade between the Southern African Development Community (SADC), Europe, the America's and the rest of the world. Additionally, certain sectors and niche industries hold opportunities for future growth and development of the country. This includes the energy sector, specialized agriculture/fisheries, as well as the tourism industry. German and European companies that are interested in the Namibian agricultural sector should inform themselves about the conditions of doing business to mitigate risks and obstacles, as well as make use of the available opportunities.

SWOT Analysis for Namibia	
Strengths	Weaknesses
<ul style="list-style-type: none"> <li>→ Significant mineral resources (diamonds, uranium, copper) and fisheries</li> <li>→ Well-developed institutions</li> <li>→ High level of national and regional logistics networking</li> <li>→ Excellent conditions for renewable energies</li> <li>→ Good governance</li> <li>→ Tourism potential</li> </ul>	<ul style="list-style-type: none"> <li>→ Very small industrial base</li> <li>→ Exuberant government sector</li> <li>→ Dependent on the mining sector</li> <li>→ High unemployment and persistent inequalities</li> <li>→ Agricultural sector exposed to climatic hazards</li> <li>→ Dependent on South Africa</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>→ Development into a regional transshipment centre</li> <li>→ Investment needs in the energy sector</li> <li>→ Development of niche industries (such as natural cosmetics, game meat)</li> </ul>	<ul style="list-style-type: none"> <li>→ Social unrest due to the economic consequences of the Corona crisis</li> <li>→ Problematic economic situation with neighbours South Africa and Angola</li> <li>→ Rising debt level</li> </ul>

Source: GTAI (2020)

## Business opportunities and risks/obstacles

The opportunities and risks/obstacles for European companies that would like to do business in the Namibian agricultural sector relate to the country's general SWOT analysis. In addition to that, the agricultural sector is defined by certain unique conditions.

Agriculture in Namibia offers many great opportunities for economic growth, employment creation, food security and poverty eradication. In order to realise these opportunities, the sector has to overcome a host of challenges.

Namibia is subjected to recurring drought and erratic rainfall. Severe drought conditions constrain agricultural output and lead to a sharp decline in harvests, but also comprised productivity of the livestock sector. This makes over-reliance on livestock production and lack of diversification all the more challenging and puts even more pressure on both livestock and crop farming.

### Challenges:

- Access to agro markets
- Access to credit/finance
- Climate change and water scarcity
- High cost of production
- Lack of quality agricultural data by policy makers
- Livestock diseases
- Loss of soil fertility
- Outdated agricultural technologies
- Relatively high food import bill

### Opportunities:

- Agricultural products: fish, fruit, meat, pasta, seafood and vegetable processing
- Agricultural training centres
- Charcoal
- Cooling rooms, maturation rooms, testing laboratories
- Cosmetics
- Cultivation of fruit and vegetables
- Customized agricultural machinery & equipment
- Environmentally friendly irrigation techniques
- Expansion of the food industry
- Leather and other handicrafts
- Processing of karakul wool, cattle leather and wild silk
- Salt (table and denatured salt)
- Smart farming
- Taxidermy and tourism

## Market entry and investment

The Namibian agricultural sector offers different opportunities for a European business involvement, including foreign direct investment, local partnerships, and/or joint ventures. In most cases, a combination of the potential forms of engagement leads to successful market entry. The most important step, when considering an engagement in the Namibian agricultural sector, is to obtain

all relevant information about the market and its conditions. This publication aims to provide the most relevant data, as well as information on where and how to obtain further details on:

- Funding
- Investment incentives
- Investment potential/ projects
- Joint venture and partnership
- Market entry support structure

## Impact of the COVID-19 pandemic

COVID-19 is set to have an unprecedented impact on Namibia's economy. With trade largely concentrated to a few countries and commodities, travel restrictions and lower demand will result in a contraction in exports. Gross domestic expenditure will also narrow as investment remains muted and the contraction in private consumption continues. Economic lockdown will also impact tourism, retailers and service sectors, which may result in rising unemployment levels. Taken together, these developments are expected to result in a growth contraction of 4.8% in 2020.

Agriculture was fortunately classified as an essential service/industry during the COVID-19 lockdown. More should however be done to ensure the sustainability of the sector beyond COVID-19. The following sectors were negatively affected by COVID-19: dairy sector, Swakara sector, tourism and trophy hunting, poultry sector as well as the livestock and meat industry.

### Farming for Resilience

The German Development Cooperation is engaged in the agricultural sector through a joint initiative called Farming for Resilience (F4R) with the Namibian Ministry of Agriculture, Water and Land Reform (MAWLR) and other partner institutions to pursue the objective of strengthening the resilience of the agri-food sector in Namibia. Following a multi-pronged implementation strategy, F4R works on the policy-, institutional and target group level and focuses on the diversification of agricultural production systems, climate-sensitive cultivation methods and water management, as well as innovative agribusiness developments along the value chain. The project focuses on seed production and multiplication, climate-adapted production, agri-business and marketing as well as food and nutrition security to enhance the adaptation capacity of Namibia's agri- and food sector to the effects of climate change and fosters the market-oriented alignment of production, processing and marketing, all the while protecting its natural resource basis. Tapping into the abundance of underutilized agricultural potential in Namibia, F4R enables small-holder farmers, in particular women and the youth, to produce in a resilient, nutrition-sensitive and market-oriented manner by conveying good agricultural practices and management skills as well as introducing climate-smart technologies.

For more information on the initiative, visit the GIZ website: <https://www.giz.de/en/worldwide/97268.html>.



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## NEW MARKETS – NEW OPPORTUNITIES: NAMIBIA

In order to support the sustainable engagement of German companies in emerging and developing countries, Germany Trade & Invest (GTAI), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the German Chambers of Commerce Abroad (AHKs) as well as other partners combined their expertise in the German publication series “New Markets – New Opportunities”.

The booklet shows companies the economic potential of future markets as well as the funding and consulting opportunities offered by the German development cooperation. “New Markets – New Opportunities: A Guide for German Companies” is supported by the Federal Ministry for Economic Cooperation and Development (BMZ). All issues are published on the websites of GTAI and GIZ. You can find selected issues, for example on Namibia also at

[www.bmz.de/bsfd](http://www.bmz.de/bsfd)



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