

Accounting for pastoralists in Mozambique



Photo: Romuald Rutazihana

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MOZAMBIQUE IS HOME to some 4.9 million small ruminants (mainly goats), 2.2 million cattle, 1.6 million pigs, and 20.8 million chickens. While chickens are the most numerous type of livestock, cattle are the most important if the relative weight of each species is taken into account. Figures for livestock holdings vary somewhat. Some 5–6% of farms keep cattle, 12–15.6% keep goats, 10.3–11.5% keep pigs, and 35–48.3% have chickens. Livestock numbers declined in the 1980s because of the civil war and collectivization, but have since recovered.

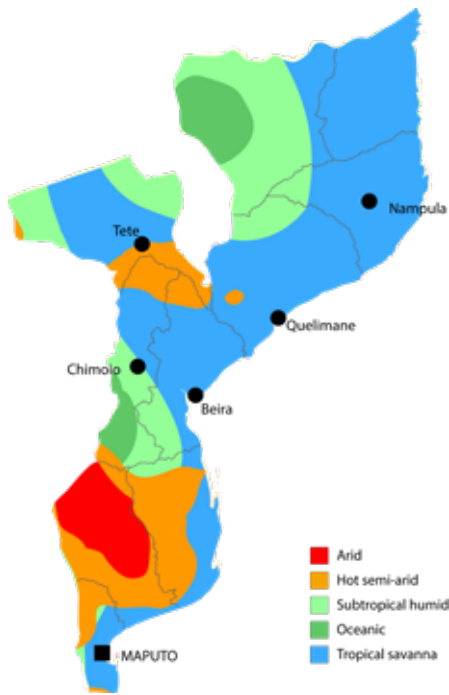
Most of the **cattle** are found in the drier, southern and central regions, which together account for 90% of the total cattle population: 58% in the south (Inhambane, Gaza, and Maputo provinces) and 32% in the centre (Tete, Manica and Sofala). The four northern provinces account for only 10% of the national cattle herd, partly due to the high prevalence of the tsetse fly, which transmits trypanosomiasis. About 90% of the national herd is kept by small and medium-sized holders, who produce two-thirds of the officially marketed beef and milk. Cattle also act as a store of wealth, a means of investment, and a source of draught power.

Goats are found throughout the country, but are more common in Tete, Manica, Sofala and Gaza provinces.

Poultry production includes scavenging, smallholder and commercial systems. Intensive commercial farms are found around urban areas, while the scavenging system dominates rural areas.

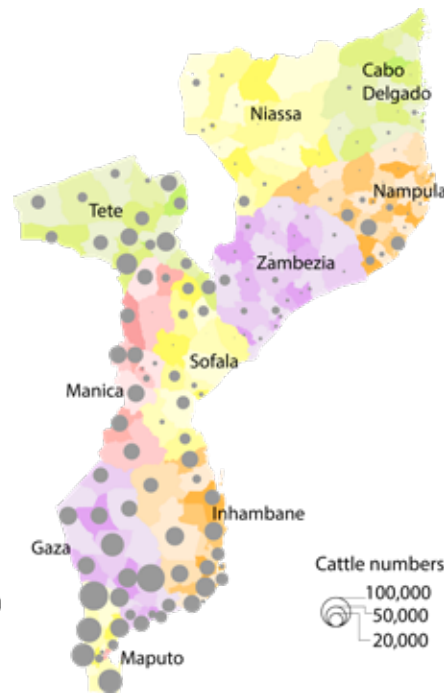
Key messages

- Agropastoralism is the main form of livestock production in Mozambique. It is concentrated in the drier, central and southern provinces, away from tsetse-infested areas.
- While chickens and goats are more numerous, cattle are the most important type of livestock. They are a source of income and draught power, a store of wealth and important culturally.
- Livestock are a vital source of income for large numbers of farmers, especially in the south of the country.
- Agropastoralism and food security could be improved through better veterinary services, improved feeding and watering in the dry season, and breeding based on local breeds.
- Agropastoralism is not officially recognized as a form of management, and it does not figure prominently in government policies.
- Better, more frequent and more detailed data will be needed if Mozambique is to take advantage of the opportunities presented by livestock for its agricultural development.



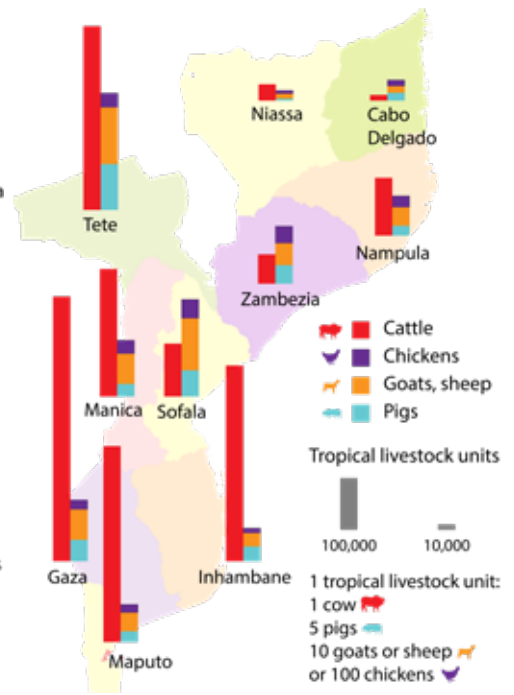
Mozambique climatic zones

Source: Wikimedia



Cattle numbers by district, 2020

Data: MADER 2021



Livestock numbers (tropical livestock units) by province, 2020

Data: MADER 2021

Agropastoralism

Agropastoralism is the most common form of livestock management in the desert and semi-arid regions in the south and centre of the country. Most agropastoralists have small permanent fields where they grow subsistence food crops. They also keep various types of indigenous cattle, sheep and goats, pigs and poultry. The ruminants graze on uncultivated common land throughout the year, and are brought back each evening to the compound for security. Sometimes they are fed on crop residues and graze on stubble after the harvest. Owners take cattle to rivers and streams up to 4 km away once every 1 or 2 days. In the dry seasons, animals put on less weight because of the lack (or poor quality) of the feed and the need to walk further to reach pasture and water.

In the cattle-keeping districts, wealthier families tend to own cattle as well as other livestock, while poorer families tend to keep goats and chickens. In some areas, livestock sales are the biggest source of cash. People traditionally keep cattle for draught and milk (rather than for their meat), as well as an investment, a store of wealth, and a status symbol. Cattle are also used as bride-price and in traditional ceremonies. Workers who migrate to South Africa often use the money they earn to buy livestock.

Four main ethnic groups, totalling 7.8 million people, practise agropastoralism:

- The **Tsonga** (or Shangani) in the southern provinces of Gaza and Maputo (4.68 million).
- The **Ngoni** in Gaza, Maputo and Tete (75,000).
- The **Sena** in the central provinces of Tete, Manica and Sofala (2.24 million).
- The **Ndau** (or Shona) in the Zambezi valley part of Manica (0.8 million).

If we assume that 70% of the ethnic groups listed above practise agropastoralism, we can calculate that some 5.4 million people or 1.3 million households depend on agropastoralism for a living.

Some communities were historically pastoralists but have adopted agropastoralism. The Tsonga and Ngoni, for example, trace their origin to the Zulu of southern Africa, who were renowned cattle keepers. Although the Ndau are considered as traditionally subsistence farmers, they also keep cattle and goats, while the Sena are regarded as farmers who keep large herds of cattle. For most of these groups, land ownership is collective and livestock is the responsibility of men and boys.

All the agropastoralist communities are also found in neighbouring countries. This has facilitated cross-border interactions, movements and trade (not all of it registered with the authorities).

Other forms of livestock production

Smallholders, especially those who keep livestock other than cattle (goats, pigs, sheep, chickens), practise non-agropastoralist production and are found nationwide, even in the crop-growing northern provinces. They graze their animals close to their villages.

Commercial beef production based on ranching on natural pasture is practised mostly in the south and central parts of the country. Companies include Alfa Comercial, Inácio de Sousa (Maputo) and Capelas (Gaza), Agro-Pecuária Abílio Antunes and Agro Maco (Manica). Some commercial farms keep animals under semi-extensive management, providing them supplemental feed, concentrates or fodder mixes prepared on the farm. In 2015, large farms (with over 500 cattle), mostly in Ma-

puto and Gaza provinces, kept a total of 233,000 cattle, 12% of the national herd.

Intensive livestock raising is found around urban centres throughout the country. It is more common with chickens, but is also found with other species. Broiler and layer operations include Higest Mozambique LDA around Maputo city, and Agro-Pecuária Abílio Antunes around Chimoio. New intensive enterprises include Tongasse Agro-pecuária, SA in Gaza, Novos Horizontes–Moçambique and LDA near Nampula.

Zero-grazing dairy production is new in Mozambique. It was introduced in 2009 in Manica province and has since spread south, reaching Maputo Province in 2014.

Breeds

Cattle. Agropastoralists keep three main breeds of cattle. Landim (“local”) are 70% of the national herd and are found in the southern lowland provinces of Gaza and Maputo. They are kept mainly by the Tsonga. The Bovino de Tete breed, almost

20% of the national herd, is found in Tete province and in central areas, and is kept mainly by the Sena. The Angoni, or Nguni, breed is kept in the highlands of Tete province by the Ngoni community; it makes up about 8% of the national herd.

Goats. There are two indigenous goat breeds: the Landim breed, which is found across the country, and the Pafuri breed, mostly in the semiarid area of Pafuri in the southwest, where it is kept by the Tsonga-Changanani community as part of a mixed crop–livestock management system.

Sheep. The Landim sheep is the most common type in many parts of the country. It is kept by most agropastoralists and often used for traditional and religious ceremonies.

Poorly planned crossbreeding and breed replacement are eroding these valuable genetic resources, and public awareness of their value is limited.

Definition of pastoralism

No official definition for pastoralists or agropastoralism exists in Mozambique. The terms *pequenos produtores* (smallholder farmers), *famílias rurais* (rural families) and *produtores do sector familiar* (family-sector farmers) are used to refer to small-scale livestock keepers, but they do not distinguish among management systems. However, many



Photo: Jacob Wanyama



Photo: Romuald Rutazihana

publications mention agropastoralism as one of the country's livestock production systems.

The Ministry of Agriculture and Rural Development classifies farms as agricultural (*agrícola*, crops only), livestock-only (*pecuária*), and agro-livestock (*agro-pecuária*) farms. However, it does not provide any figures for the numbers of livestock or production in each of these three categories. Nor does it provide data on the number or distribution of such farms.

The Ministry also classifies farms by size: it divides them into small, medium, or large, depending on the area cultivated and number of livestock kept. In terms of livestock, small holdings have up to 10 cattle, and up to 50 goats, sheep or pigs. Medium holdings have up to 100 cattle or 500 of the other species; large holdings have more than these. In 2020, the vast majority of holdings (4,167,702 holdings, 97.79% of the total) were classed as small; 93,183 (2.19%) as medium; and only 873 (0.02%) as large. But there is no information on the livestock management types of each farm size.

Economic contribution

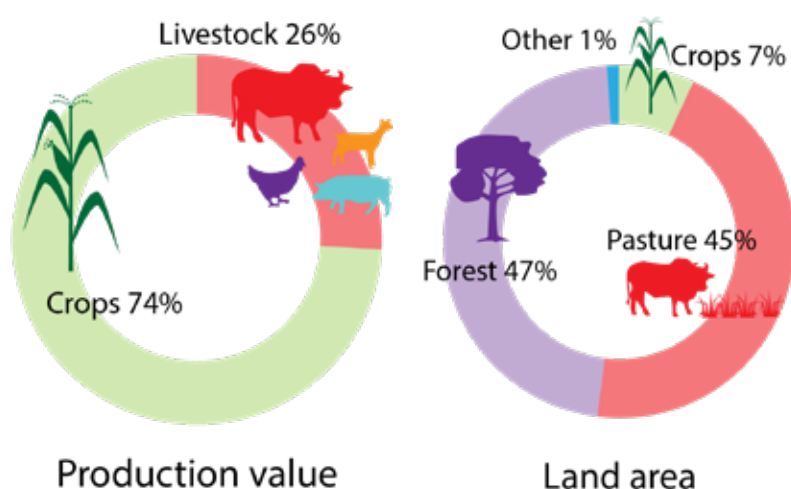
Mozambique is an agricultural country, and about 62% of the population live in rural areas. In 2020, livestock contributed USD 1.05 billion to the national economy, or 24% of the USD 4.02 billion for agriculture as a whole, according to FAO. The livestock sector has grown by 9% a year over the last 10 years, and the authorities are slowly recognizing its importance. While cropping is seen as having the greatest potential in the centre and north, livestock are regarded as more promising in the southern provinces, which are drier and exposed to recurrent floods and droughts, so are riskier for crop production.

There is very limited data on the contribution of agropastoralism to the sector. Compared to ranching, with its single product (beef), agropastoralism has higher overall returns per hectare because of its multiple benefits: draught, transport, manure, milk, and meat. In addition, livestock also act as

savings, payment of dowry, financing, insurance against risk, and they have social and cultural significance.

Most livestock are sold in village and district markets. Secondary markets are located in the main urban centres, and Maputo, the capital, serves as the tertiary market. Despite the increasing importance of livestock, Mozambique's output falls well short of meeting domestic demand for livestock products. That makes the country highly dependent on imports, mostly from South Africa, Swaziland and Botswana, as well as from Brazil for chicken. In 2016, 32.5% of the meat, 83% of the milk, and 90% of the eggs were imported.

In 2019, Mozambique was the country most affected by extreme weather worldwide. Livestock are a vital source of resilience for farmers in such situations.



Production value and land area of crops and livestock, 2000

Data: FAOSTAT

Policy environment

The government aims to develop basic infrastructure and promote private investment to boost output and productivity in the agricultural and livestock sector. But policies put more emphasis on crops rather than livestock. In livestock, the priority is on commercial ranching, poultry and more recently, dairy. For example, the Programa de intensificação da produção pecuária (PIPEC) of 2015–2019 promoted livestock intensification (mainly beef production) in areas with the greatest agroecological potential. It supported the gradual improvement of the extensive production system through genetic improvement, enhanced disease control and better grazing management. The government has been promoting large-scale investments in agriculture and supporting market-ori-

Sources of data on pastoralism in Mozambique

Institution	Parameters	Years covered	Comments
Ministry of Agriculture & Rural Development ¹	No. of livestock, agricultural holdings, households, distribution	Annual to 2015	Agricultural statistics yearbook
	No. of livestock, agricultural holdings	2020	Agricultural integrated survey
	Contribution to GDP	All years	
National Directorate of Livestock Development, Ministry of Agriculture ²	Number of livestock, distribution and production systems	All years	Data published on MADER website
National Institute of Statistics ³	Livestock numbers	Up to 2008	
FAOSTAT	Livestock numbers, national	All years	Usually an extrapolation
CGAP		2015	National household sample survey
Research publications	Agropastoral systems and numbers	Occasional	Individual research

1 MADER, *Ministério da Agricultura e Desenvolvimento Rural*; before 2020: Ministry of Agriculture and Food Security (*Ministério da Agricultura e Segurança Alimentar*) www.agricultura.gov.mz

2 DNDP, *Direcção Nacional de Desenvolvimento Pecuário*, formerly *Direcção Nacional de Serviços de Veterinária* (National Directorate for Veterinary Services)

3 INE, *Instituto Nacional de Estatísticas*, www.ine.gov.mz

ented farmers. The limited availability of data to reflect the economic contribution of agropastoralism limits the potential to invest in this sector.

Mozambique has a large potential for agricultural development: cropland currently covers just 7% of the country, and pasture 45%. But the expansion of cropping may be at the expense of pastureland used by agropastoralists. The government had tried to attract large-scale foreign investment in agriculture, but many such schemes have failed, in part because of resistance from the residents and users of the supposedly “unused” land. The government closed its dedicated promotion agency, CEPAGRI, in 2016.

Land tenure is also an issue. The 1997 Land Law provides individuals, communities and entities long-term or perpetual rights to land (though the state retains ownership), even if they lack formal documentation. But this law has not been adequately implemented, and communal land users are often subject to exploitation by investors.

Opportunities to improve agropastoralism and ensure food security abound. They include improved health services (vaccination, pest control), improved sources of feed during the dry season, breeding (based on local breeds), and the provision of water. Providing draught animals to poorer households would enable them to expand their crop production.

How to improve the data situation

Agropastoralism should be recognized as a distinctive production system. Data should be disaggregated by production system to reveal the roles of agropastoralism and other management systems. Data is needed on the number and distribution of breeds, and on ethnic groups engaged in livestock

production. Regular updates on human and livestock populations are needed. Institutions to take a lead include:

■ **INE**, *Instituto Nacional de Estatísticas* (National Institute of Statistics), www.ine.gov.mz

■ **MADER**, *Ministério da Agricultura e Desenvolvimento Rural*, Ministry of Agriculture and Rural Development: *Direcção Nacional de Desenvolvimento Pecuário* (National Directorate for Livestock Development) and *Direcção de Planificação e Políticas* (Planning and Policies Department). www.agricultura.gov.mz

■ **IIAM**, *Instituto de Investigação Agrária de Moçambique* (Mozambique Institute of Agricultural Research), iiam.gov.mz

■ **Universities**: Eduardo Mondlane University, www.uem.mz; Joaquim Chissano University

■ **Nongovernment** organizations and networks.

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Published 2023 by the League for Pastoral Peoples and Endogenous Livestock Development (LPP), www.pastoralpeoples.org

Financial support Misereor, International Union of Biological Sciences

Citation Wanyama, J., and R. Rutazihana. 2023. *Accounting for pastoralists in Mozambique*. League for Pastoral Peoples and Endogenous Livestock Development, Ober-Ramstadt, Germany.

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