



# Moving Animals and/or Moving Grass?

A Clash of Pastoralist Livelihood Interests and Livestock Business Interests in Drought-prone Somaliland



**WAGENINGEN**  
UNIVERSITY & RESEARCH

wur.eu

## Colophon

### Authors

Adam Ahmed Adam<sup>1</sup>, Ted Schrader<sup>2</sup> November 2024

<sup>1</sup> Freelance consultant, Erigavo, Sanaag Region, Somaliland,

<sup>2</sup> Wageningen University and Research, Wageningen Centre for Development Innovation, The Netherlands

### Photography

Ted Schrader (cover, p3, p4 bottom), Abdinasser Ahmed Adam (p4 top), Haradigeed, <https://www.facebook.com/share/15Sj1WShSp/> (p7 left), Dukehart (p7 right, p8),

Naresh Kumar Nain, Thies Reemer, Dereje/Shutterstock.com, David Obiero (back cover)

### Design

Erika Endrődiné Benkő

This case study is part of the informal economies trajectory of Wageningen University and Research together with alumni from different countries in Africa, Asia and Latin America (KB-35 programme 2023–2024).

This report can be downloaded for free at <https://doi.org/10.18174/680195>

© 2024 Wageningen Centre for Development Innovation, part of the Stichting Wageningen Research. P.O. Box 88, 6700 AB Wageningen, The Netherlands. T+ 31 (0)317 48 68 00, E info.cdi@wur.nl, [www.wur.eu/cdi](http://www.wur.eu/cdi).



Wageningen Centre for Development Innovation uses a Creative Commons Attribution 4.0 (Netherlands) licence for its reports.

The user may copy, distribute and transmit the work and create derivative works. Third-party material that has been used in the work and to which intellectual property rights apply may not be used without prior permission of the third party concerned. The user must specify the name as stated by the author or licence holder of the work, but not in such a way as to give the impression that the work of the user or the way in which the work has been used are being endorsed. The user may not use this work for commercial purposes.

The Wageningen Centre for Development Innovation accepts no liability for any damage arising from the use of the results of this research or the application of the recommendations.

Report WCDI-24-395

Livestock is the basis for most livelihoods in Somaliland. It contributes directly and indirectly to Food, Income and Trade and constitutes two thirds of employment and export revenues for the country. Livestock is also at the heart of the Somali culture. This paper explores the Somaliland livestock sector from different perspectives, e.g. livelihood, value chain, business, technical and political economy perspectives. These complementary perspectives provide fundamental insights for food system transformation that take the complex agro-ecological and socio-cultural conditions of Somaliland into account. Without doubt, the collaboration of informal and formal actors is a precondition to sustainable success.

# Livelihood perspective

## Livestock culture

For pastoral and semi-pastoral communities, animals are a way of living and source of income. Camel, goat and sheep husbandry is deeply rooted in the local culture. Over many centuries, animals in Somaliland have adapted to climate and feeding conditions. Extreme aridity has resulted in hardy, thrifty, and drought-tolerant animals that can survive and reproduce in harsh conditions. A nomadic pastoral system has enabled communities and livestock to find water and grazing in scrubby grassland that receives very little rainfall.

Camels are highly valued as they are sturdy, can last long without water, and give milk during the dry season. Camels are core in Somali culture, and out of respect they are hardly used for transport and land preparation. Sheep and goats are very important in day-to-day life and of key importance to family income. They provide milk and meat and can be easily sold when necessary. Sheep and goats are valued as gifts and payments in kind. Clans keep female sheep and goats in herds and allow that male animals may be sold at markets.

### Did you know?

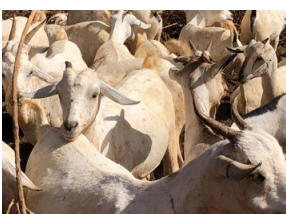
- Somaliland has millions of animals (1.7 million camels, 8.4 million goats, 8.8 million sheep and 0.4 million cattle in 2011).
- The livestock sector employs 70% of the Somaliland population and contributes 60% of GDP.
- Livestock contribute to 85% of foreign export earnings.
- Sheep and goats account for 91% of all animal exports in Somaliland.



**Camels** are very important in Somali culture, exemplified by the fact that there are many words in Somali language for (different kinds of) camels. Camels are greatly respected because they are the basis of the nomadic lifestyle that has existed for centuries, and they help communities to survive in the harshest environments and most difficult periods. Camel renting is a way of restoring camel herds after great droughts.



**Somali sheep** are a distinctive breed, usually white with a black head and have remarkable fat storage capacity in their hindquarters. Somali sheep have hair like goats to keep them cool. Their lifespan is 10–12 years. Rapid reproduction is possible. Ewes generally reach sexual maturity at six–eight months of age, and rams generally at four to six months. The gestation period is about five months. Maintaining rams is economically less interesting, as fodder and costs are required.



The **Somali goat** is a domestic goat breed. Short-eared goats are most common in Somaliland. There are many sub-species. The medium-size, docile Somali goat is well-known for its quality meat. They are hardy and can feed themselves with any type of vegetation. Somali goats are agile, with long legs that enable them to walk long distances and reach the leaves of trees and shrubs. A doe can have one to three kids per litter (four to six is possible, but rare). Breeding selection criteria differ for females and males. Mothering ability, yield, kidding history, manageable behaviour and hardiness are most valued for does. For males which are destined for sale, colour and body condition are most important (Cooper, 2022).

## Coping with drought and insecurity: Focus on resilience and herd restoration

Agro-pastoralists, and especially pastoralists, keep relatively large numbers of animals in part, so that they are prepared for drought and other calamities. The size of herds can strongly fluctuate over the years. Goats and sheep are very important for rapid recovery from losses. Camels and indigenous breeds of cattle, goats and sheep are well-adapted to prevailing conditions (Muigai, 2016). Camel lending mechanisms are important for camel herd restoration; this practice has existed for centuries. Camel leasing (through camel dairies) is a new modality tested in Somaliland (RTI international, 2020, and 2021, Nori, 2010)



**Figure 1:** Camel drinking water from animal troughs.



**Figure 2:** Sheep and goats drinking water from the open source of shallow well.

## Income-generating activities that sustain livelihoods

There are many livestock-related income-generating activities that vary from collecting and aggregating goats and sheep (pastoralist relationship vendors), meat production (many different Somalian specialties, for instance *Oodkac* - dried camel meat), dairy production (many different milk products, such as fresh and sour milk, butter, ghee, camel milk. Milk processing and selling, small animal and meat trade are often particularly important for women. In towns, there are many small informal businesses: butchers, small market outlets, dairy kiosks, (sweet- or sour-) milk vendors, tea shops, home delivery services, and others.

As in many African countries, informal saving and credit groups (*hagbads*) are common in Somalia, especially among women. A *hagbad* is comprised of people who know and trust each other and come together to save small amounts of money at regular intervals (per week, per month). The money saved is pooled and handed over to one group member, who can then invest it into an entrepreneurial activity. The next round, it is the turn of another group member. When each group member has received a payment, the group starts the process-cycle again.



**Figure 3:** Women in agropastoral community, Caynabo.

# Value chain perspective: diversity of livestock products and markets

There is a diversity of livestock product markets in Somaliland:

## Sheep

- Live animal sales for villages and district markets.
- Live animals regional centres, such as Erigavo and Lasanood and Burao.
- Live animals for export (mainly young rams), which are passed through quarantine centres and then shipped via Berbera and Busaso to Saudi Arabia and Gulf countries.
- Meat and meat products for local markets.
- Fat (hindquarters, distinctive for Somali sheep).
- Milk and cheese.
- Bones, skins, manure for fertiliser.
- Females for breeding and local use.

## Goats

- Live animal sales for local and national markets.
- Live animal sales for export (Saudi Arabia), mainly bucks.
- Meat and meat products for local markets.
- Manure.
- Bones, hides.

## Camels

- Live animals for village- and district markets.
- Live animals for national markets (mainly Burao and Hargeisa).
- Live animals for the international markets (Gulf countries).
- Preserved meat (*Oodkac* or *Mugmad*).
- Camel milk.
- Fat, soap, bones, jewellery and handicraft products.
- Hides, manure, urine for medical use.

## Cattle

- Meat and meat products.
- Milk, butter, ghee, cheese.
- Breeding: heifers, cows, bulls.
- Local consumption: Lasanood, Erigavo, Burao, Hargeisa.
- Export from Sool and Sanaag via Berbera and Busaso to Gulf countries.
- Manure-fertiliser, biogas, bonemeal as animal feed, draft power, hide/leather.

This general overview of the diversity of livestock products and markets suggests that there are opportunities for improving value addition and sales for pastoral and agro-pastoral communities.

## Value addition

For activities that add value, cultural habits, gender and access to credit are important factors to consider.

**Dried meat.** *Oodkac* or *Muqmad* is what Somalis prepare to preserve meat. *Oodkac* can be prepared from different types of meat, but it is traditionally prepared from camel meat. Often, women groups buy a slaughtered camel, for the *Oodkac* business. The meat is cut into small pieces, deep fried and then stored in oil to extend its shelf life. The process adds value to the meat. It can remain usable for a year and even longer, depending on the type of oil used for preservation. The demand for dried meat is high throughout the year and is a source of regular income. Somalis take it with them when going for pilgrimage (*Xajka*). It is also prepared for wedding ceremonies, and as a gift for the new groom and bride (*arooska iyo aroosadda*). According to Amoon, living in the Erigavo/Booca settlement, "The loss of knowledge on meat preservation and discarding of the practice was found to be a contributing factor to the increased risk of food insecurity to pastoralist households".

**Milk products.** The supply of milk in Somaliland is very seasonal. Children and young people help their mothers and sisters to clean buckets and wash the animals' udders. Women/girls milk goats, sheep and cattle two or three times a day. When available, milk is used fresh or boiled. Fresh milk can also be preserved by smoking, which gives the milk a special taste and odour. *Qarbad* (bladder; traditional storage container made of livestock skin or hide) is used to ferment milk into a kind of butter. Then, the butter is skimmed off, kneaded in cold water, and washed to remove any remaining buttermilk. Most pastoral communities process milk at household level into milk products, such as butter and ghee, using traditional techniques.

Milk products are marketed through informal channels. When milk is abundant, the price of milk products is low. During a large part of the year milk production is very low due to good grazing conditions. Traditionally, hides and skin are used for storing water, butter and milk. Hides and skins were cured and tanned through dry salting to minimise the likelihood of putrefaction. In this way the hide was not a perishable commodity. Hides and skins are now replaced by plastic, jugs, and jars, buckets, water bottles and aluminium vessels.

## Market outlets

For exploring market opportunities, three market locations are important: local markets, national markets and export markets. For communities, transactions with travelling traders and sales at local markets are most important. During periods of drought, pastoral communities often sell off their animals. For these transactions, communities have limited bargaining power. When selling camels, sheep or goats for export, communities generally use (trusted) intermediaries who receive a fee for their services. Prices are determined before the transaction or agreed upon when the intermediary is negotiating at the market (for instance, in Burao).

Burao, Berbera, Busaso and Hargeisa are among the most important national markets, which are dominated by large traders. Burao is relatively close to Sool and Sanaag. It is a very important livestock market for domestic demand, but it is especially a transition market for animals being transported to Berbera and Hargeisa. Berbera is presented as the largest trade 'on the hoof'. The export market for goats and sheep is very seasonal (see next Chapter). Busaso – in nearby Puntland – is also a very important market for Sanaag and Sool. Like Berbera, it is a very important market, in which animals are shipped to Saudi Arabia and the Gulf states. Hargeisa, the capital of Somaliland, is the most important domestic market, which offers most potential for animal product development, diversification and year-round sales.

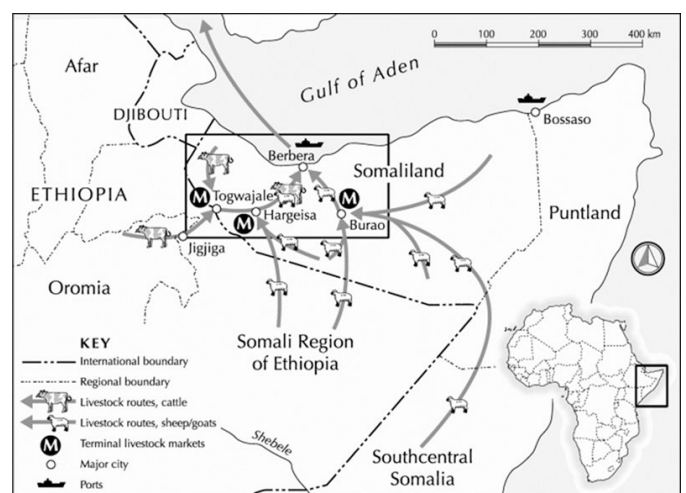
# Commercial perspective: livestock export business

## Animal exports

As mentioned in the box on the first page, the livestock sector is the backbone of the economy of Somaliland, for community livelihoods, for employment, for GNP and for export earnings. In fact, Somaliland exports millions of animals every year, mainly sheep and goats. In 2011, a total of 3.35 million animals were exported: 96,000 camels, 151,000 cattles and 3,105,000 sheep and goats, mainly rams and bucks of two- to three-years-old (Somaliland Ministry of Livestock).

The peak export season are the two months preceding the hajj (Muslim pilgrimage to the Kaaba in Mekka, Saudi Arabia), e.g. the period between *Eid el Fitr* and *Eid el Adha*. Saudi Arabia imports goats and sheep from Somaliland for the millions of foreign Hajj pilgrims.

From Eastern Somaliland, sheep and goats transit via Burao to Berbera, where the main seaport is. From there, sheep and goats are shipped, after a quarantine period of some weeks. Camels are also exported to Saudi Arabia. Cattle exports are mainly from Western Somaliland to Djibouti. Sheep and goats are also shipped from Bossaso in Puntland, albeit to a lesser extent. The number of exported animals largely exceeds the domestic consumption of animals, which is approximately half a million animals.



**Figure 4:** Animal movements in Somaliland. Source: Musa, Wasonga and Mtimet, 2020.

## Saudi markets and bans

Three main factors influence livestock exports in Somaliland's terminal markets: the Hajj season, livestock export bans, and the number of exporters that are operating in the market (Musa, Wasonga and Mtimet, 2020). Saudi Arabia is by far the most important market for 'shoats' and camels. It is relatively nearby and easy to reach by boat. The importance of this market (>90% of the export destinations) creates dependency, as seen with the bans of 1997, 2001, 2009 and 2016 and the market decline resulting from the Covid-19 pandemic. These bans hit very hard and prevented millions of animals from being exported, translating into low prices per animal due to oversupply and millions of dollars of economic loss. Repeated bans indicated poor sanitary condition of livestock and failure to meet minimum sanitary requirements (bans were imposed by Saudi Arabia due to detection of Rift Valley Fever and Foot and Mouth Disease. At this moment, there is still a generic ban, for which an exception is made for goats and sheep that are destined for foreign pilgrims visiting Saudi Arabia.

## Commercial interests

The very high Hajj season volumes indicate increasingly seasonal livestock trade. Musa, Wasonga and Mtimet observed that due to Saudi and Somaliland Government policies there are monopolistic exporters/ quarantine station investors in the markets, who have the power to impose prices in the market. Low prices induce the sale of young animals.



**Figure 5:** 'Qarbad', traditional container made of animal hide or skin, used to store milk, water or butter.



**Figure 6:** Sheep and goats are brought from around the region to the Burao Livestock Market. Traders use a system of holding fingers to indicate the price they are willing to accept. Negotiations are made in secret under a scarf.

The exporters are linked to Somaliland animal traders, who ensure the cattle movement from the production zones to Burao (first transit station) and from there onwards to Berbera. Market prices for small ruminants in the large Burao livestock market depend on quality and especially on seasonality (e.g. Hajj demand).

To reduce livestock disease issues and bans, Saudi livestock importers decided to invest and construct quarantine stations in the city of Berbera. The Saudi Emirate Veterinary Quarantine Management Company in Somaliland has the capacity to hold 300,000 animals at a time.

Upon arrival to the quarantine station, animals are ear-tagged, go through clinical inspection, and are vaccinated. Each exporter has a pen in the quarantine to keep animals for a period of time in accordance with the prevailing requirements related to sourcing, pre-export quarantine, and testing. After quarantine, the sheep and goats are walked to the port of Berbera, where they are herded on boats bound for Saudi Arabia, some of which can hold 85,000 animals.



**Figure 7:** Quarantine centre in Berbera, the main seaport in Somaliland.



**Figure 8:** Animals herded in ship in Berbera.

## Need for fodder

This seasonal, monopolistic market system requires the availability of fodder for the millions of animals that are exported. Each exporter handles thousands of animals which need fodder and water, during their journey: from the camps and villages to the Burao cattle market, during their journey to Berbera, during the quarantine period (which is often two- to three-weeks), and in the ships. This means that the Somali traders and exporters require a large amount of fodder during the peak marketing period.

In the next chapter, some of the technical aspects related to rangelands and fodder production are explored. Thereafter, we focus on the conflicting interests of pastoral and agro-pastoral communities on the one hand, and of exporters and traders on the other hand.

# Technical perspectives on water, grass and fodder

In a dry country like Somaliland, fodder production is a very delicate and risky operation. Considering the diversity of (pastoral and agro-pastoral) communities and agro-ecological conditions in Eastern Somaliland, it is important to explore the best practices for rangeland use, fodder production, and for grass and fodder harvesting, storage and processing. We, thus, discuss water harvesting, fodder production options, rangeland management, re-seeding, fodder storage and fodder product development, fodder use and effects on livestock production, animal health and product quality. This exercise shows that there are many technical options.

### Water harvesting

More than anything, water is the limiting factor for the growth of natural grasslands and for fodder production. In the context of Somaliland, the following are important action-oriented questions: *What are the options for water harvesting? Can erosion control be combined with water harvesting? Are crescent shape check dams (half-moons) an option, as they allow a longer spillway? Can the hardpan soil be broken to facilitate rainwater infiltration and promote grass production? Can fodder production or hay making be concentrated in (small) valleys, where scarce water is a bit more concentrated? Can satellite images be used to identify the most promising valleys and can these be used to investigate further with local stakeholders and decision-makers? Can stones be eliminated and used for contour lines, so as to create space for mechanized grass mowing and hay collection? Can road construction and maintenance be an option to create areas where water is collected and infiltrating?* (Green roads for water, 2018 and 2022, Mganga, 2018, Mganga et al., 2022).



**Flood-based irrigation and road water harvesting** are two options to boost fodder production in drylands that concentrate on better water capturing and infiltration. Systematically introducing the spreading of short-term floods from ephemeral rivers and from road drainage combined with water retention in trenches will lead to increase of soil moisture levels. This can revitalize drylands into a more productive system – in terms of

return to labour. Growing fodder with flood and road drainage water has several advantages: (1) it turns a threat (flood/drainage water) into an asset; (2) it relieves the pressure on the dry rangelands and creates an economically rewarding production system; and (3) it requires almost no land preparation and may, therefore, be applied in areas that are short of skills and labour (Mganga, 2018).

### **Nutritional value of natural fodder in (semi-)arid pastures – Perspectives for haymaking**

In arid and semi-arid conditions like in Somaliland, young grass is of high quality. “Young plants absorb as many nutrients as possible from the soil in the early stages of growth, but do not have the chance to dilute them because of the short season.” (Breman, 2021). The vegetation also has no time to become fibrous and difficult to digest. This vegetation is, thus, ideal for animal feed. Nomadic and semi-nomadic pastoralists have known this for a long time, therefore, moved their animals to semi-desert areas with young grass.

An important implication and option for action is to cut this grass: “When cut before flowering, dried grass (hay) keeps its nutritional value for quite some time.” This personal communication of Dr Breman induces two strategic questions: (i) *Should fodder production focus on natural grass harvesting and haymaking, as the nutritional value of grasses is high in arid/semi-arid areas?*; (ii) *Should rainfed and irrigated agriculture focus on cereal, leguminous and other crops, with most attention on the production of fodder as a by-product? If so, the next question logically follows: Is it possible and feasible to harvest the good natural grass that sprouts and grows everywhere during a short rainy season, and to make hay from it?*

The labour costs of fodder production are currently high and are a strong disincentive for communities to engage in fodder production. This strongly suggests that specific efficiency efforts must be made: Purposeful fodder production in selected areas (such as valleys), mechanized grass mowing, and smart options for hay collection and transport. This could create opportunities for farmers, communities and possibly youth groups to specialise on fodder/hay production. The overall question is: *If grass mowing, hay collection and transport are economically feasible?* Some sub-questions are the following: *Can areas with potential for haymaking be identified?; Is mechanized grass mowing possible, for instance with two-wheel hand-held tractors?; Can a tractor and cart hire service be linked to this activity (for hay-collection and transport)? Is re-seeding an option?*

**Re-seeding programs** aim at improving existing ground cover and pasture biomass to an extent or in a manner not possible by grazing management. Re-seeding can be part of rangeland management and it can be applied as a strategy for optimising grass/fodder production in designated

grass/fodder production areas (such as valleys or areas with water harvesting). This can be accomplished by over-sowing into existing vegetation with a superior species, re-seeding a denuded land and/or establishing new pasture areas, possibly with some sort of irrigation.

### **Fodder production in agro-pastoral communities**

Practical questions include: *What are the best fodder species, with specific attention for indigenous grasses and trees, specifying nutritional value, palatability, processing, seeds – seed bank. What well-known grass and fodder species can be tested in Somaliland (for instance, Alfalfa, Sudan grass)? What are the options for fodder seed selection, seed production and distribution? Is it an idea to establish a fodder seed bank? And to have specific sites for fodder seed production (rainfed-irrigated)? What are the best fodder production practices ?*

### **Fodder processing and fodder product development**

Once produced or collected, fodder requires good post-harvest operations to ensure conservation, to maintain quality and/or to add value. *What are the most important operations? Which machines are required and available? What are required investments and good practices? How do post-harvest operations add value to the quality (and the cost) of fodder?*

---

### **Fodder use and effect on animal weight, health and quality**

Once produced and processed, fodder is input for livestock keepers. Also here, there are quite some action-oriented questions: *How do different types of fodder have an impact on the growth, weight and health of (different types) of animals? How does fodder transform into more body weight, more milk, higher quality and less losses for different animals and different age groups? What is the effect of fodder in the first year(s) of animal growth? What is its effect on young and growing animals? What is its effect on pregnant and lactating animals? How does this compare to feeding adult animals? What is the effect of fodder on live animals that are to be sold for slaughtering and meat? Does evidence suggest using feed for certain animals, growth stages and economic objectives?*

All the questions that have been asked in this chapter are important to prepare technically for years ahead. However, it is not enough to be technically prepared. A key challenge is focus on interests, power and conflicts, as the next chapter will illustrate.

## Land tenure and access to rangelands: Highly conflicting interests

For livestock production, space, as such, is not a limiting factor in Somaliland. Due to the arid climate and higher frequency of prolonged drought periods, access to water and to nutritious grass and fodder are, however, very important restrictions.

Due to colonization by the British (current Somaliland) and the Italians, the land tenure system of Somalia has always been complex. The Agricultural Land Law of 1975 abolished private ownership. Long leases from the State were envisaged to be possible. In practice, conceding land leases became however an instrument to reward loyal clans. The civil war and the fall of the central Government saw the rise of customary *Xeer* law, which put clan land governance and relations between clans centre stage, with a focus on pastoral land use (SDC, 2018).

The Somaliland constitution provides that land is public property, commonly owned by the nation. The Government has created means of granting land to private citizens, especially for urban and agricultural land. This is of course an instrument for binding influential. Granting access to land, pastures or giving the right to exploit natural resources are instruments for binding citizens and leaders to the Government, and an opportunity to raise taxes.

The *Xeer* law views rangelands as a collective clan asset. Clans can allow other clans to graze on their lands in times of need. The customary *Xeer* law prohibits building enclosures or permanent settlement on pasture land. Over time, the *Xeer* law has integrated specific rules and regulations set by the Government (cutting trees and grass, charcoal making, transporting and trading charcoal and grass, make settlements in the valleys, killing wildlife).

This is explicitly mentioned in the speech of a clan leader of Dhahar in Eastern Sanaag, which is transcribed in the box on the next page.

According to law and custom, only cultivated land can be enclosed. Due to the lack of fodder, the motivation of harvesting grass in agro-pastoral enclosures is very high. Grass harvesting can only be legally practiced in official enclosures or land concessions. Hence, anyone (pastoralists, traders, communities) wishing to enclose rangeland have to create at least a small, cultivated area within the enclosure, to give an appearance of complying with the law. In actual practice, that is what many do, implying that a lot of enclosure land is not productively used.

In open natural rangeland, community elders control grass harvests. They do not support enclosures, as these are seen as land grabbing. And they do not support grass harvesting in open fields, which is seen as violating the law. Both practices are likely to spark conflict.

### Traditional leaders warning – Full transcription of a speech from a clan leader

No man in Dhahar is older than me. I swear, we have killed people for charcoal burning, land degradation. We killed a lot of people for these acts; some are injured, some are disabled. We are saying, bring to us if the Government authorizes, if the Ministry of Environment is aware of this, let them call us. We were told at the Police Station that it will be taxed. *They know their authorities. It is prohibited for us to cut grass, charcoal burning. It is prohibited to burn a house.*

I greet all of you, the people that gathered here. Our environment faces many problems including deforestation, *over-harvesting by cutting grass on pasture land for business purposes.* We are informing the Government of Puntland, the regions, districts and the people that *the land is shared by Somalis, from those who stay in Lawyacado, or in Dhusamareb, Raskambonni, the grasslands for livestock are shared, although we settle the land by clan, but the grasslands for animals are collectively owned.*

We told the people of Puntland that we face drought. The drought resulted in poverty, starvation. The animals perished because of hunger; the people used to get food handouts. The remaining of the animals were taken to Bari (Eastern Region). The people in our lands, if it is Bari, ... the Eastern parts of Sanaag region, ... upper Sanaag, ... the highland, ...in Karkar, ... in Nugal, or ... Lascanod, ... even in Kalkacayo. *All these places moved and settled in the same place.* The people in Burao also moved to that place. It was the time to move to the East.

The Somali people face many problems. Deforestation is the worst problem encountered, charcoal, *cutting grass started after it rained.* The people cutting trees were talked there, *the police station in Dhahar district.* The police officers said three lorries were apprehended, so we are asked to tax lorries. Who asked you to *tax the lorries.* If the tax is imposed by an administration, the Ministry of Environment, the Ministry of Development, if they release it, they should speak about it; *it is prohibited for our places and towns.*

It is prohibited to cut grass or burn charcoal, also using our land for transporting grass and charcoal is prohibited. Now, we ceased three lorries, *and we burned their load. If the practice is not maintained by the administration, we are ready to act ourselves.*

*We will consult anybody;* taxation is prohibited, and cutting trees and grass is prohibited. It is illegal to trade charcoal and grass. It is illegal to make settlements in the valley, it is illegal to kill wildlife, it is illegal to burn houses; it is illegal to do all things that can wrong the country for the Somali people. It is all regions, it capital, the regions in Lascanod, Sanaag, East Sanag, Haylan, ... Bosaso region, Karkaar region, Kardafuu region; *all places where Somali people live. We share grasslands, our country is connected.*

We demand the respected Ministry if the Government authorizes for taxation, if the Ministry of Environment is



Figure 9: Stills from the speech of a Dhahar clan leader. Source: <https://www.facebook.com/share/v/1WupHmp3cz/>

aware of it, let them inform us. The police told us that they will take taxes. *The police know their supervisors and authorities; it is illegal for us to cut grass, charcoal burning, burning houses, settling valleys, lorries can't pass through, new camps cannot be erected.*

We are informing the public where they are, in towns, district or region, the people offering their lorries, we tell you, we executed people for charcoal burning, land degradation, we executed a lot of people. There are injured people and disabled people for such acts. We announce and inform the Somali people to be careful about such things. In our side, we will double down our efforts. We inform the Somali people that it is illegal to do all the things I mentioned.

Who is a person who can say I will permit your land for charcoal burning. We will not ask anything; we will kill them, I swear. I am the oldest in Dhahar. The land is communal. Who does otherwise, we will kill. Be aware if you have a God, *our land cannot be used as a route to transport charcoal and grass; we will destroy it by burning. We don't want you to use our lands; avoid us. We prohibited it.*

We have not seen charcoal for more than a decade. Use the routes you used these times. Somalis, I urge you not to use our land; use different routes you use to take. I greet you all and leave you to be vigilant; my people be grateful for God's blessings. Thank you.

**The key elements of the speech are the following:**

Clan leaders have authority over the use of rangelands. "We share grasslands, our country is connected". The clan leader makes reference to many districts and clan areas and to the principle that grasslands for livestock are shared among Somalis. This is presented as the official situation ("We are informing the Government, Ministries, regions and districts.").

The commercial grass transporters, who are collecting grass for non-clan members (large cattle owners, large traders, markets and quarantine centres) are violating the Xeer laws, including official Government regulations. It is specified that they do grass cutting after it rained, e.g. when grass has best nutritional value.

Complicity of Government and Police officials: "They know their authorities. The reference to taxation is also suggesting corrupt practices. The police know their supervisors and authorities."

There is recognition that the environment has to be protected for the interest of pastoral livelihoods, but it is strongly argued that rules and regulations have to be respected by all. The threat commercial use of natural resources (especially charcoal making and cutting grass for business purposes) are explicitly mentioned.

There is frustration and anger that while the clans are not allowed to do many things, the government and districts grant access for commercial interests and are (apparently) receiving taxes for it.

The clan leader is clear that if the authorities do not maintain the regulations, the clans are ready to act themselves. And that is what they did: Lorries were burned.

The speech is recorded and broadcasted to inform everybody that illegal acts will be heavily sanctioned, because our land cannot be used as a route to transport charcoal and grass; "We will destroy it by burning. We don't want you to use our lands; avoid us."



**Figure 11:** Lorries with grass set on fire in Dhahar district (Eastern Sanaag). Source: <https://allsanaag.com/xaalufinta-degaanka/>.



**Figure 10:** Stills from the speech of a Dhahar clan leader. Source: <https://www.facebook.com/share/v/1WupHmp3cz/>

“

*Before the pastoralists had customary land use and tenure systems, defining collective rules that govern land occupation and land distribution. Now a lot of the pastureland in Erigavo has been enclosed by individuals for 'banking', e.g. having land registration under rule of law. Land is not used for its value as pasture. This is leading to resource-based conflicts and to competition and over-grazing.*" (Muse, Erigavo)



---

# A clash of interests of informal and formal governance systems

In Somali society, traditional elders play a vital role, acting as negotiators, mediators, and advisors for their clans. And people often seek their guidance on issues before taking further action. The pastoral and agro-pastoral societies, which rely on livestock production and grazing for their livelihoods, are informally organised. Their activities aim to sustain their herds and households, rather than commercial production and sales, aimed at sustaining their households rather than operating within structured business frameworks. The individuals and companies that are engaged in livestock trade and export are more formally organised (registration, official market transaction veterinary controls and quarantine). They are strongly profit-oriented and more linked to the Government and regulatory requirements.

The informal systems led by clan elders lack a formal, written governance structure. These systems operate under customary practices that prioritize the pastoral lifestyle and community interests. Among Somalis, traditional elders and pastoralists rely on unwritten laws, oral traditions and memories of past events to make decisions. In contrast, formal actors, such as large traders, exporters and Government agencies, refer more often to written laws and regulations.

Currently there is a run on land to create official enclosures, often without the intention to manage the enclosed area on a sustainable basis. Cattle and fodder traders try to do so, by establishing good relations with Government officials. Pastoralists, especially those who are influential and have many animals, try to secure enclosures for 'banking' purposes. Also local communities started settlement of unplanned villages in places where there are adequate rangeland resources. This created local tensions and conflicts and more intensive use worsened the condition of the rangelands. Many Somalis from the diaspora are also getting enclosures, to the concern of pastoral communities in the country. Also clan leaders have made demarcations on pastoral grazing land to the benefit of rich business people and themselves. In this context of drought and reduced pasture lands, pastoral communities are increasingly marginalized and dropping their way of life. Seasonal mobility as the best agroecological way to use fragile pastures is increasingly abandoned.

Historically, clan leaders were chosen for their charisma, spiritual blessings, and cultural standing, with a preference for those who were vocal and respected. Today, however, leadership selection leans more towards political influence, wealth, and inheritance. This can be a risk and it can be an opportunity. It is a risk when clan leaders accommodate the interests of commercial traders, rich people from towns and the diaspora and Government interests, for own benefits, at the expense of community interests. It is an opportunity if the clan leaders use their political influence and understanding of Government regulations and commercial interests to defend the interests of the communities that they represent.

## Implications for food system transformation

Livestock production is deeply rooted in the Somaliland clan-based society. For centuries, nomadic pastoral and semi-sedentary lifestyles have for centuries been the best human adaptation to the semi-arid climate and fragile ecosystems. However, the traditional systems are reaching their limits, because of conflicts and civil war, climate change, more frequent and severe droughts, urbanisation, commercial interests of large traders and exporters and land grabbing.

We have argued that the challenge of food system transformation requires in-depth understanding of the local situation.

---

In this paper, different complementary perspectives have been explored:

- Socio-cultural perspective: The deeply rooted livestock culture, rangeland and herd management practices and related pastoral livelihood interests.
- Value chain perspective: The diversity of livestock products and markets.
- Economic perspective: The livestock export business and commercial interests.
- Technical perspective: Rangeland management, fodder harvesting and production.
- Power and conflict perspective: Land tenure and access to rangelands.

The fundamental conflict between pastoral livelihood interests and livestock business interests, epitomized by the burning of grass-loaded lorries, shows that Somaliland requires fundamental transformation of the current livestock system. The largely informal, traditional pastoral livelihoods are increasingly under pressure. In the context of long periods of drought, their search for water and fodder is about the survival of herds and communities. The conflict between traditional pastoral livelihoods and commercial interests of large traders (and related Government officials) is about survival of the fittest. The important commercial interests related to the export of millions of live animals (which brings in most of the export revenues), have the power to influence the Government and Police to support their interests (in return of advantages). It is in this context that some clan leaders are taking (violent) action to preserve their interests, while other clan leaders grant benefits to others, for own gains at the expense of pastoral communities.

The analyses in this paper suggest that for moving beyond the conflict between livelihood and commercial interests, it is important:

- To empower communities to benefit more from value addition and trade. In the current situation, the communities are price takers when selling live animals. Opportunities for value addition (which are many, cf. diversity of livestock products) can be better harnessed with improved access to credit and investment capital.
- To optimise the sustainable use of natural pastures, which are very rich after the short rainy season. Opportunities for grass harvesting and measures for improved water harvesting exist.

Both pastoral and agro-pastoral communities could benefit more by holding more control over the trade of live animals (at least to the Burao market), increasing value adding activities, reducing losses (of animals, milk) and by investing in good grass harvesting practices, for the use of fodder for own animals and for traded and exported animals.

The clan leaders can indeed be custodians of the land and should be involved in any project envisaging livestock sector development, climate adaptation, poverty reduction or natural resource management. Their deep cultural and spiritual roles should and cannot be underestimated.

Food system transformation will inevitably be a long process, during which the extensive system (animals moving to grass) and semi-intensive livestock production systems (with grass moving to animals) will co-exist. This can be a joint process, if a broad partnership of clan leaders, Government and commercial interests is created. Instead of all losing, there are perspectives that benefit all.

Key elements of the strategy toward food system transformation would be the following:

- Identify and consult clan leaders, with technical capacity building for grass harvesting and natural rangeland management and economic capacity building for inclusive value chain development.
- Involve clan leaders in developing information sharing systems and in program design, implementation and monitoring.
- Integrate *Xeer* customary law and Government rules and regulations and communicate and apply these for all.
- Demystify the technical and economic issues related to grass harvesting and fodder production and develop fodder value chains to link communities to commercial interests.
- Establish value chain relations from animal producing communities to primary traders and exporters in Berbera in Busaso.
- Develop well-tailored financial products for investment in income generating activities.

*Co-existence and mutual benefits of pastoral livelihood interests and commercial interests*

---

# References and further reading

- Alin, F, 2008. Somaliland Micro-Finance. Case study: the experiences of Doses of Hope (DoH) in Somaliland. <https://www.networklearning.org/ngo-fields/case-studies/74-micro-finance-in-somaliland>
- Al Jazeera, 2013. Somaliland prepares for mass cattle trade (short film, 2:31 min). <https://www.youtube.com/watch?v=CuO3c7S71Do>
- Amole, T.A., & Ayantunde, A.A. 2019. Livestock feed resources in West African Sahel: a review.
- Breman, H., Schut, A., & Seligman, N., 2019. *From fed by the world to food security. Accelerating agricultural development in Africa.* Plant production systems, Wageningen University and Research. <https://henkbreman.com/wp-content/uploads/2019/11/H.-Breman-A.G.T.-Schut-N.G.-Seligman-2019.-From-fed-by-the-world-to-food-security.-PPS-Wageningen-University.pdf>
- Breman, H., 2021. Livestock and food security in Africa. NVAS Newsflash February 2021. [www.henkbreman.com](http://www.henkbreman.com)
- Burman, J., Bowden A., & Gole, A., 2014. Land tenure in Somalia. A potential foundation for security and prosperity. <https://shuraako.org/sites/default/files/documents/Land%20Tenure%20in%20Somalia%20A%20Potential%20Foundation%20for%20Security%20and%20Prosperity.pdf>
- Calhoun, N., Cabot Venton, C., Clarey, T., Dalmar, A., & Bashir, F., 2020. Mapping of financial services for SHG's and barriers for women to access microfinance services in Somalia. <https://www.concernusa.org/wp-content/uploads/2020/08/Concern-Worldwide-Somalia-Mapping-Financial-Services-Report-May-2020.pdf>
- Cooper, T., 2022. Breed profile: Somali goat. Galla goats provide somali goat meat, milk, income and cultural benefits for arid grassland pastoralists. <https://backyardgoats.iamcountryside.com/goat-breeds/somali-goat-breed-profile/>
- Dukehart, C., 2014. Robin Hammond: The largest trade 'On the hoof'. National Geographic 2014. <https://www.nationalgeographic.com/photography/article/robin-hammond-the-largest-trade-on-the-hoof#:~:text=Hammond%20says%20the%20export%20of,hoof%E2%80%9D%20anywhere%20in%20the%20world.>
- FAO, 2013. Somaliland. Participatory and Negotiated Territorial Development. Reference made in Burman 2013.
- FAO, 2018. Improving pasture management in arid and semi-arid lands in the Horn of Africa through Pastoralist Field Schools. An implementation strategy to support pastoralist communities build resilience against drought. <https://www.fao.org/3/I8855EN/i8855en.pdf>
- FAO, 2018. Farmer field schools for small-scale livestock producers – a guide for decision-makers on improving livelihoods. <https://www.fao.org/3/I8655EN/i8655en.pdf>
- FAO, 2021. Livestock production in Somaliland is stabilized through farmer trainings. <https://reliefweb.int/report/somalia/livestock-production-somaliland-stabilized-through-farmer-trainings>
- Feedipedia – Animal feed resources information system. Collaboration of FAA, INRA and CIRAD. <https://www.feedipedia.org/content/about-feedipedia>
- FEWS Net, 2022. Somalia Livestock Price Bulletin. [https://fews.net/sites/default/files/documents/reports/PB\\_SO\\_202204\\_LIVESTOCK.pdf](https://fews.net/sites/default/files/documents/reports/PB_SO_202204_LIVESTOCK.pdf)
- Frumkin, 2021. Video: What is camel leasing? <https://agrilinks.org/post/video-what-camel-leasing>
- Gaani, M.X. et al., 2002. Regulating the livestock economy of Somaliland. Academy for peace and development, Hargeysa, Somaliland. [https://www.somali-jna.org/downloads/APD\\_Livestock\\_Economy\\_16July023.pdf](https://www.somali-jna.org/downloads/APD_Livestock_Economy_16July023.pdf)
- Green roads for water. 2018. Roads for water – the unused potential Poster for International conference on water, environment and climate change, Kathmandu, Nepal. [https://roadsforwater.org/wp-content/uploads/2020/11/poster\\_Roads-for-Water\\_the-unused-potential-new.pdf](https://roadsforwater.org/wp-content/uploads/2020/11/poster_Roads-for-Water_the-unused-potential-new.pdf)
- Green roads for water, 2022. Green roads for water scoping study in Somaliland. <https://roadsforwater.org/green-roads-for-water-scoping-study-in-somaliland/>
- Global Forum on Migration and Development (GFMD), 2019. Somali Agrifood Fund. <https://www.gfmd.org/pfp/ppd/10931>
- Hoehne, M.V. & V. Luling (eds.) 2010. Milk and peace, drought and war. Somali culture, society and politics. (Essays in honour of I.M. Lewis). [https://www.academia.edu/230364/Milk\\_and\\_peace\\_drought\\_and\\_war\\_Somali\\_culture\\_society\\_and\\_politics\\_Essays\\_in\\_honour\\_of\\_I\\_M\\_Lewis?auto=download](https://www.academia.edu/230364/Milk_and_peace_drought_and_war_Somali_culture_society_and_politics_Essays_in_honour_of_I_M_Lewis?auto=download)
- Hoehne, M.V. 2015. Between Somaliland and Puntland – marginalization, militarization and conflicting political visions. Rift Valley Institute – contested borderlands.
- Hoehne, M.V. Somaliland 30 years after secession. Le monde diplomatique, 18 May 2021. <https://mondediplo.com/outsidein/somaliland-thirty>
- Hoehne, 2022. Being a de facto state is not enough. Somaliland's innovative regime. [https://www.academia.edu/77034017/Hoehne\\_2022\\_Being\\_a\\_de\\_facto\\_state\\_is\\_not\\_enough\\_Somalilands\\_innovative\\_regime](https://www.academia.edu/77034017/Hoehne_2022_Being_a_de_facto_state_is_not_enough_Somalilands_innovative_regime)
- ICS. How to grow Alfalfa under arid conditions. Accessed February 2023. <https://www.ics-agri.com/alfalfa-under-arid-conditions.html>
- ILRI, 2022. De-rsiking, inclusion and value enhancement of pastoral economies in the Horn of Africa – Social assessment Somalia, International Livestock Research Institute, June 2022.

- 
- ISTVS 2015. Market prices in Burao livestock market, June 2015. <https://igadstvs.wordpress.com/2015/06/11/market-prices-in-burao-livestock-market/>
- Kusters, C., Idle, A., Chapman C., and Boerema, E., 2023. FNS-REPRO Somaliland – Key findings from literature review, rapid fodder value chain assessment and stories of change. <https://edepot.wur.nl/585753>
- Manyeki, J.K., et al., 2020. Economics of seed and hay production in arid and semi-arid areas. Kenya Agricultural and Livestock Research Organisation. KALRO Information Brochure Series No. 2017/004. <https://www.kalro.org/sites/default/files/Economics-of-seed-and-hay-production-in-Arid-Dec2020.pdf>
- Mganga, K., 2018. Fodder production with road water harvesting in African drylands. <https://knowledge4food.net/fodder-production-with-road-water-harvesting-in-african-drylands/>
- Mganga et al., 2022. Combining rainwater harvesting and grass reseeding to revegetate denuded African semi-arid landscapes. *Anthropocene Science* 1, 80-90. <https://link.springer.com/article/10.1007/s44177-021-00007-9> or <https://doi.org/10.1007/s44177-021-00007-9>
- Ministry of investment and industrial development. Livestock. Consulted February 2023. <https://moiid.govsomaliland.org/article/livestock-1>
- Mtimet, N., F. Wanyoike, K. Rich & I Baltenweck. 2021. Zoonotic diseases and the COVID-19 pandemic. Economic impacts on Somaliland's livestock exports to Saudi Arabia. <https://www.sciencedirect.com/science/article/pii/S2211912421000225>
- Mohamed, M., 2015. Using livestock manure to improve soil fertility offers ways to enhance forage SNF fodder production. <https://igadstvs.wordpress.com/2015/06/11/using-livestock-manure-to-improve-soil-fertility-offers-ways-to-enhance-forage-snf-fodder-production/>
- Muhumed, M., & Yonis, A., 2018. The future of Somaliland livestock exports: examining the sustainability of livestock trade. *International Journal of Management, Accounting and Economics* Vol. 5, No. 8, August, 2018.
- Muigai, A., Matete, G., Aden, H.H., Tapio, M., Okeyo, A.M. and Marshall, K., 2016. *The indigenous farm genetic resources of Somalia: Preliminary phenotypic and genotypic characterization of cattle, sheep and goats*. ILRI Project Report. Nairobi, Kenya: ILRI. <https://core.ac.uk/download/pdf/132683417.pdf>
- Musa, A., 2019. From trust to oligopoly: institutional change in livestock trade in Somaliland after 1991. Danish Institute for International Studies, Working paper 2019: 8. [https://pure.diis.dk/ws/files/2962153/DIIS\\_Working\\_Paper\\_2019\\_8\\_final.pdf](https://pure.diis.dk/ws/files/2962153/DIIS_Working_Paper_2019_8_final.pdf)
- Musa, A., Wasonga, O., & Mtimet, N., 2020. Factors influencing livestock export in Somaliland's terminal markets. *Pastoralism*, Volume 10, 1. <https://pastoralismjournal.springeropen.com/articles/10.1186/s13570-019-0155-7>
- Nori, M., 2010. *Milking drylands – gender networks, pastoral markets and food security in stateless Somalia*. PhD Thesis Wageningen University. <https://edepot.wur.nl/51717>
- Nori, M., & Scoones, I., 2019. Pastoralism, uncertainty and resilience: global lessons from the margins. *Pastoralism*, 9, nr 10 (2019) <https://doi.org/10.1186/s13570-019-0146-8>
- Ogillo, B.P. et al. Hay making and storage for livestock production in arid and semi-arid areas. Kenya Agriculture and Livestock Research Organisation (KALRO). [https://www.kalro.org/asal-aprp/sites/default/files/Feed\\_conservation\\_in\\_ASALs\\_final-2.pdf](https://www.kalro.org/asal-aprp/sites/default/files/Feed_conservation_in_ASALs_final-2.pdf)
- Kadenyi, N., Kioko, T., Bosma, L., Mganga, K., van Steenberg, F., & Kaindi, E. 2020. Pasture management with indigenous grasses and road water harvesting in arid to semi-arid lands (ASAL). <https://roadsforwater.org/wp-content/uploads/2020/07/Grass-practical-web-publishing-1.pdf>
- Patinkin, J., 2016. Meat for Mecca: Somaliland exports livestock for the Hajj. <https://www.voanews.com/a/meat-for-mecca-somaliland-exports-livestock-for-the-hajj/3489292.html>
- RTI International, 2020. Somalia camel leasing to impact resilience activity. Phase one highlights brief (January 2020). [https://agrilinks.org/sites/default/files/media/file/Final\\_Camel\\_Leasing\\_Phase\\_1\\_Brief\\_0.pdf](https://agrilinks.org/sites/default/files/media/file/Final_Camel_Leasing_Phase_1_Brief_0.pdf)
- RTI International, 2021. Camel leasing: exploring the private sector's role in resilience. <https://www.rti.org/impact/camel-leasing-exploring-private-sector%E2%80%99s-role-resilience>
- RTI International, 2021. Camel milk rapid value chain analysis. <https://www.rti.org/brochures/somalia-camel-milk-value-chain-analysis>
- Shuraako – Ray's Farm. Sheep and Goat fattening farm – Halimaale and Borama, Somaliland. [https://shuraako.org/sites/default/files/images/content/Rays\\_Farm\\_Profile.pdf](https://shuraako.org/sites/default/files/images/content/Rays_Farm_Profile.pdf)
- SomaliBiz – Comprehensive somililand economy sector guide – livestock sector guide. <https://www.somalilandbiz.com/sector-guides/livestock/>
- Somaliland Sun, 2016. Somaliland: Dahabshiil group boosts clans reconciliation initiative. <https://somalilandsun.com/somaliland-dahabshiil-group-boosts-clans-reconciliation-initiative/>
- SDC, 2018. Land governance in IGAD region. Somalia Country. Swiss Agency for Development and Cooperation. <https://land.igad.int/index.php/documents-1/countries/somalia/profiles-4/913-land-governance-in-igad-region-somalia-country-profile/file#:~:text=The%20Somaliland%20Constitution%20provides%20that,for%20urban%20and%20agricultural%20land.>
- ProfileTanwar, S.P.S. 2018. Rainfed integrated farming systems in arid zone: resilience unmatched. *Indian Journal of Agronomy*, 63 (4), p. 403-414 (December 2018). <https://krishi.icar.gov.in/jspui/bitstream/123456789/21599/2/2018IJAIFS.pdf>



- 
- Wanyoike, F. et al., 2015. Knowledge of animal grading and market participation among sheep and goats producers in Somaliland. <https://cgspace.cgiar.org/bitstream/handle/10568/66011/ResearchBrief47.pdf?sequence=4>
- Wasonga, O.V. & A.M. Musa, 2019. Fodder trade in livestock markets of Somaliland. Governing economic hubs and flows Somali East Africa. <https://govsea.tumblr.com/post/187149011019/fodder-trade-in-livestock-markets-of-somaliland>
- Wangili, A. 2015. Somaliland: Livestock trade accounts for 40% of GDP, earns country 80% Forex – ILRI Study. <https://igadstvs.wordpress.com/2015/06/11/somaliland-livestock-trade-accounts-for-40-of-gdp-earns-country-80-forex-ilri-study/>



---

Wageningen University & Research  
P.O. Box 47  
6700 AB Wageningen  
The Netherlands  
T +31 (0) 317 48 07 00  
[www.wur.eu](http://www.wur.eu)

The mission of Wageningen University & Research is "To explore the potential of nature to improve the quality of life". Under the banner Wageningen University & Research, Wageningen University and the specialised research institutes of the Wageningen Research Foundation have joined forces in contributing to finding solutions to important questions in the domain of healthy food and living environment. With its roughly 30 branches, 6,800 employees (6,000 fte) and 12,900 students, Wageningen University & Research is one of the leading organisations in its domain. The unique Wageningen approach lies in its integrated approach to issues and the collaboration between different disciplines.

---