Position paper

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Smallholder livestock farming in the Global North and South !

The right solution for our societies and the environment

For over 40 years, AVSF has been supporting smallholder organizations and communities where livestock farming is fundamental, and even central to their way of life, as is the case with the pastoral and transhumant communities in the Sahel, Mongolia and the Andes. Much debate has emerged about livestock farming in the past decade, particularly in France and other industrialized countries. Some of the controversial issues raised have to do with "animal welfare", meat consumption, and the impact of livestock farming on the climate, natural resources, and human health. Society's expectations are high, particularly in Europe, following extensive media coverage of food scandals, farms failing to respect animal welfare, and voices challenging the very principle of livestock farming.

As an NGO operating mainly in the Global South but based in the Global North with many members and donors in France, AVSF wanted to weigh in on these discussions. In this position paper,

we reaffirm our position on livestock farming in both the North and the South, and on the different types of livestock farming that we promote and defend in our projects in the South and in our advocacy work.

1. Livestock farming has received much criticism...

Livestock farming in the Global North and in certain countries in the Global South has been scrutinized and criticized in recent years, and has sometimes even been fiercely attacked.

It is criticized primarily for :

→ **Its environmental impact :** Livestock farming is often blamed for contributing to climate change through greenhouse-gas emissions and land-use changes (particularly deforestation), polluting water resources through livestock waste, degrading resources (water, land, energy) through intensive use, using GMOs (processed corn or soy) in animal feed, and producing transgenic animals (e.g. salmon).

→ **Its impact on health :** Excessive meat consumption is causing nutritional diseases in the Global North; it is believed to cause cardiovascular problems linked to high cholesterol, and is even suspected of causing cancer (scientific findings on the correlation between meat consumption and colon cancer are still uncertain). Meat is the main food group receiving such pointed criticism, and changes in meat consumption would have a major impact on the entire agricultural sector, including crop production (particularly grains). Milk consumption (specifically cow's milk) has also come under scrutiny. Although milk is the best source of calcium in our diet, some people are lactose intolerant. Milk (like meat) is also sometimes blamed for the onset of certain cancers, although this has not been substantiated by science. Livestock farming is also said to present a risk of increasing antibiotic resistance. Lastly, health crises (BSE, avian flu, salmonella) have undermined confidence in food safety and health measures on livestock farms. This is why there are often calls to limit the consumption of meat in our diet – in most cases moderately, but in some cases drastically.

→ **Zoonotic risks directly or indirectly linked** to deforestation provoked by livestock farming in tropical countries, and its contribution to the emergence of new diseases. Deforestation is often cited as a consequence of livestock farming, and Brazil is a prime example. Grazing lands in Brazil are expanding into forest areas as a result of the displacement of livestock farmers. Those farmers are being driven out of their traditional farming lands by the expansion of soy cultivation, boosted by strong growth in global demand. But deforestation also has many other causes, such as oil palms in Indonesia, cacao plantations in Ivory Coast, etc.

→ **Livestock living conditions and livestock-farming ethics :** Conditions on livestock farms are scrutinized and criticized by society, which is concerned with the "welfare" (we prefer the term bientraitance ("good treatment"), the opposite of mistreatment) and comfort of livestock (access to outdoor spaces, freedom of movement, light, density) and is opposed to certain practices, such as dehorning, docking, separation of calves from their mother, force-feeding, etc. The fact that livestock are raised for consumption is seen by some as an indication of animal mistreatment. Others with more radical views believe humans should not exploit animals for meat or for animal-derived products.

Lastly, in some countries (particularly in Europe), positive statements in the media affirming the benefits of livestock farming for human societies and the planet are becoming increasingly rare, except in very specific cases (for instance, when discussing locally produced specialities).

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2. Livestock farms perform a number of essential functions for our societies and the environment

As different as they may be, livestock farms throughout the world, in both the Global North and South, perform several functions that are essential to our societies and our planet. Those functions are highlighted below.

Livestock farming plays an important socioeconomic role for many smallholders and their families throughout the world : It is a source of income for 600 million people (1/10th of the world's population)! It is a way of life and an absolute necessity for pastoral communities. Often it is the only activity that can be pursued in those communities given their location, and constitutes their only source of monetary income, without which they would not have access to certain goods and services, such as schooling for their children, medical care, and cereal for survival. This is also the case in sedentary polyculture and livestock-farming systems dependent on food production : in those systems, livestock farming is essential for getting through the "lean season" and completing each annual agricultural cycle (depending on the year, some of the animals may need to be sold). It's a form of insurance!

Livestock farming makes use of land that cannot be used to grow crops, and then allow communities to live there, for thousands of years, particularly through pastoralism. For example, livestock farming can be pursued in mountainous areas and wetlands, as well as on land that is too dry, rocky, steep, or arid to grow crops. In other words, it can be performed on 3.5 billion of the planet's 4.5 billion hectares of agricultural land !

Livestock farming is a way to build capital [1] : Farmers can use this "four-legged capital" to gradually build up their resources (e.g. 10 chickens for 1 goat, 10 goats for 1 cow, etc.), and communities can use it to lift themselves out of poverty. Thanks to its plasticity, it is also a form of precautionary savings, as it can be mobilized if needed or in the event of a crisis. It is therefore a precious source of economic resilience, and food and nutritional security for many communities. It can also cover cash needs ; for instance, milk provides regular income.

Livestock farming is multifunctional: It produces foods that are rich in protein (milk, eggs, meat) as well as non-food products (leather, fur, wool). Animal excrement is used for fertilizer to improve soil fertility (manure or compost). Methanation units (biodigester) can transform that organic matter into energy, offering alternatives to current sources of energy (particularly firewood for cooking) and helping combat deforestation. Lastly, in many countries, livestock farming is still necessary as it provides draught power for tilling fields, sowing seeds and boosting the productivity of farm work. It is also used for carrying things by cart, whether transporting products to sell at the market or simply moving organic matter (manure or compost). By facilitating tillage and transport, draught animals help make work easier for humans and alleviate poverty.

Livestock farming complements agriculture, and both are closely intertwined. Livestock consume agricultural products produced for their use, as well as by-products of foods produced for humans. Agriculture provides livestock farms with fodder for ruminants during the dry season, nitrogen supplement in feed rations, poultry feed, etc. In return, livestock farming provides agriculture with organic manure as well as draught power for facilitating work and transporting products to market. Livestock farming is therefore essential when it comes to helping agricultural systems and entire regions transition to agroecology.

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It is not said enough, but livestock farming (particularly ruminants and pigs) is absolutely necessary when it comes to transforming and making use of cellulose, which makes up a large part of the biomass produced by photosynthesis. Cellulose is a constituent of insoluble dietary fibre and cannot be digested by humans, who do not have the right enzymes to do so. Only microbial fermentation can break down cellulose to obtain carbohydrates that humans can digest. The active bacteria are found in the rumen (ruminants), caecum (pig, horse, rabbit, etc.), gut (termite), or in the soil. It is therefore impossible to break down cellulose without livestock farming (ruminant, pig, rabbit), unless you domesticate termites (cellulase) or bury it. Otherwise, it will be consumed by fire (brush fires or other types of fire). It is perhaps not a coincidence that many smallholder communities hold termites sacred: For Bambara communities in West Africa, killing termites is a sacrilege.

Lastly, livestock farming still has a prestigious function in many rural societies (as evidenced by the noble ethnic groups of livestock farmers, such as the Tuareg, Fule, Maasai and Tutsi) depending on how many livestock one has. To this day it is still associated with numerous family events (sacrifice when someone dies or is circumcised, provision of a dowry upon marriage, etc.), cultural events, and religious events (Easter, Eid al-Adha, etc.). And in most livestock-farming systems across the world, from France's Cantal, Beaufortain and Basque regions, to pastoral lands in the Sahel, the Andes and the Mongolian steppes, there is a unique relationship between the animals and the men and women who raise them. It is therefore at the heart of our different cultural identities.

[1] Capital and cattle share the same etymology (from capitalis).

3. Looking beyond livestock farming as a whole to critically examine specific livestock-farming systems and their impact on the environment

Criticism targeting livestock farming are worth being heard. Several of the above mentioned impacts and risks are undeniable and have been confirmed by facts and scientific analysis. But given the essential and irreplaceable functions that livestock farming performs in our societies and for the environment, and upon closer analysis of some of the arguments levelled against livestock farming, it is not so simple to draw conclusions from that criticism.

With respect to the climate, it is undeniable that livestock farming contributes to the emission of greenhouse gases : 14% according to the latest scientific estimates. The lion's share of those emissions are methane, produced mainly through enteric fermentation in ruminants during digestion and through the fermentation of animal waste (manure and slurry). By way of comparison, livestock farming emits as much as – but no more than – rice farming. Livestock farming also contributes to the emission of nitrous oxide (N2O) into the atmosphere through the overuse of nitrogen fertilizers (mineral and organic) on crops grown for animal consumption. Lastly, 25% of CO2 emissions are linked to land-use changes (mainly deforestation for logging and the expansion of pastures) and the use of fossil fuels (particularly for tractors). Methane is 28 times more powerful than CO2 at warming the planet. Nitrous oxide, however, has a warming potential 25 times higher than an equivalent mass of methane and 300 times higher than an equivalent mass of CO2 when it is released into the air. What's more, not only does each of those gases have a very different warming potential, they also have different lifetimes: roughly 100 years for CO2, 120 years for N2O, but only 12 years for methane. So while reducing methane emissions caused by livestock farming is certainly a priority, more intense action must be taken to reduce first and foremost N2O emissions, followed by CO2.

To do so, **livestock farming needs to take a critical look at its own practices. But what type of livestock farming? After all, every livestock-farming system is different...**

> **If we consider feedlots in North America, Australia, Argentina and Brazil, where tens of thousands of animals are intensively reared according to industrial practices, farms in France with free-range poultry or 60 pasture-fed cows suckling their young, smallholder dairy farms in southern Senegal with three to six cows, or a pastoral herd driven extensively throughout the Sahel, it is clear that they don't all have the same impact on the climate or the environment.**

To complicate matters further, it is thanks to certain livestock-farming systems that many prairies and pastures in Europe and throughout the world **play an important role in capturing and permanently storing CO2 in the ground.** They also play a role in the regulation of water cycles, the quality of landscapes, and biodiversity. Those pastures would not exist without ruminants, who are the only animals capable of grazing the land and transforming grass into milk and meat. If livestock farming were eliminated in temperate countries, those prairies and pastures would ultimately be replaced with other crops, and some of the sequestered carbon would be released; or else the landscapes would become overgrown...

In the mid-2000s, **controversy also arose over competition between humans and livestock for water resources** : "It takes 13,000 to 15,000 litres of water to produce 1kg of beef." But that figure needs to be put into perspective: it refers to "virtual" water, which includes all the water that travelled through the plants the animals ate, the water they drank, and the water used for their upkeep. Whether rainwater is used to grow grains or grass, whether the land is left uncultivated or covered in forest, it doesn't change the fact that that water will eventually evaporate from the soil and be transpired by plants to go back up into the atmosphere where it will continue to make its way through the water cycle (water is a remarkable resource – finite, but totally renewable). And what conclusions should be drawn from the substantial differences between different livestock-farming systems? If "virtual" water consumption per kg of beef varies between 26,100 litres for grass-fed livestock in India, and 3,850 litres for industrial livestock in the US2, should we conclude that in the future we should favour meat from American feedlots and industrial farms, whose impact on the climate alone is widely known and criticized ? **In reality, humans don't consume water. Nor do plants or animals.** They may dirty it. They may pollute it. But they always give it back to the environment (which is not true for other resources, such as oil). Water is an inexhaustible resource. But because it is unevenly distributed in space and time, and because its availability per capita decreases as population increases, it is a resource that must be shared and carefully managed.

More than water consumption, it is the way in which water is shared and managed that should be carefully examined in each of the different livestock-farming models, as well as disparities in access to water in each region and territory observed.

Taking a critical look at livestock-farming models is also necessary given the desire to ensure good treatment of livestock : of course, there is no comparison between a highly concentrated industrial farm with caged poultry or confined pigs, and a farm where animals are allowed to free range or are kept in clean and spacious stables, pens or runs, and where they are properly cared for.

> **It was the industrialization of livestock farming for purely capitalistic and profit-driven motives that gave rise to the disrespectful treatment of animals.**

From time immemorial and still to this day, most smallholders throughout the world (in France, Europe and in the Global South) believe that animals have dignity. They have no interest in mistreating their animals. Their animals provide them with food, an often vital income, and a means of transport. In many regions of the world, their animals still help them till the land. **But in order to be in a position to treat their animals well, livestock farmers must not find themselves in miserable social, economic or food situations.** This is especially important in the Global South, when smallholders, livestock farmers and their families find themselves in very precarious social or health situations, and/or are undernourished or malnourished.

In Europe, the steady decline in cereal prices on national and international markets since the 19th century has been one of the causes of the growth of livestock farms, the only alternative allowing smallholders to continue to make use of their grain production. And as it is still practised intensively on certain farms, the cultivation of grains for animal feed is still – in addition to affecting the climate – wreaking havoc on biodiversity. But it is the competitive and unlucrative markets that drove livestock farmers to intensify and industrialize their farms to the point where they are now engaged in unsustainable and strongly criticized practices.

> **Going beyond the different farming models, the workings of those international markets – including grain prices paid to farmers – should also be closely examined.**

[2] MM Mekonnen and AY Hoekstra, 2012: Global assessment of the water footprint of farm animal products, Ecosystems 15, 401–415

Lastly, because we are omnivores, our diet should include livestock-farming products. Lacto-ovo-vegetarian diets can provide balanced nutrition, but we mustn't forget that cows produce milk only after they give birth, and that hens come from fertilized eggs, half of which produce males. **So even those diets depend on livestock farming [3].** While animal products are an important source of protein in our diet, they also provide for our energy needs. For instance, livestock farming produces one-third of the available calories in France (source: FAOSTAT). In the Global South, a sickness called kwashiorkor (which causes belly distension) has had devastating effects in children between one and three years old. It occurs when a child is weaned early from their mother's milk, and provided with a diet consisting only in grains. As long as those children are receiving good quantities of milk from their mother, they should be getting enough high-quality protein containing all of the essential amino acids they need to stay healthy and grow. But often when the mother realizes she is pregnant again, she stops breastfeeding.

There is no doubt that in France, the debate on lowering meat consumption, which is widely covered in the media, overshadows other important public-health debates, such as : the overconsumption of carbohydrates (and fried vegetable fats) and its effects on obesity and the cardiovascular diseases it causes ; the overconsumption of cane sugar and beet sugar ; and the production of alcohol from agricultural products, which, in addition to being detrimental to public health, causes major social problems too.

Instead of putting all the blame on livestock farming or meat consumption, those issues should be repositioned in a more global debate on improving human food consumption that recognizes the importance of a balanced diet comprising reasonable quantities of a wide range of components (animal proteins as well as carbohydrates and lipids, etc.) and that also includes a reasonable proportion of animal proteins.

A recent survey by Réseau Action Climat4 (February 2021) found that 96% of French people consume meat, but that half of them have reduced their consumption over the past three years. The reasons they gave included both personal issues (health, saving money) and societal concerns (welfare of livestock, reducing their impact on the environment). **Reducing meat consumption therefore involves consuming better quality meat (local products from certified farms that have good animal-welfare practices), not replacing meat with a different type of food. Smallholder livestock farms in both the Global North and South are certainly well-positioned to meet that criteria.**

At the heart of all the criticism and stigmatization of "livestock farming", one question remains central throughout the world : **Which livestock-farming models should be promoted in order to overcome food, climate and environmental challenges, satisfy society's high expectations, and meet the social, economic and cultural expectations and needs of the millions of men and women whose livelihood depends on livestock farming ?**

[3] As of 2019, India was the world's largest producer of milk (source: MEAE) and the world's third-largest exporter of beef, behind Brazil and Australia.

[4] Moins et mieux : un élevage et une consommation de produits animaux respectueux de la planète, Réseau Action Climat France, February 2021

4. Smallholder livestock-farming systems able to withstand criticism through their actions

From the very outset, AVSF has always stayed true to its mission and does not promote all forms of livestock farming. Our aim is to promote, develop and improve the performance of "smallholder livestock farming". It is a vitally important mission, as those are the livestock-farming models that are practised by most smallholders throughout the world and that constitute their livelihood. And, given the challenges smallholders currently face, those models are particularly relevant and effective.

All of those smallholder models have the following characteristics in common :

→ **They are rooted in a specific geographic area**, adapted to that area, and based on proximity and a bond of trust between producers and consumers regarding the quality of the products and the ways in which they are produced.

→ **They utilize local resources in the best way possible:** grass and water in pastoral areas, and particularly agricultural products in polyculture and livestock-farming systems through the recycling of human food residue by animals, the use of locally produced foods to limit energy consumption and the climate footprint (by reducing transport), and the use of livestock-farming by-products for agricultural production. This means that feed is, so far as possible, not in competition with human foods, and that plant and animal production complement one another to maintain soil fertility and facilitate the crop rotations that are essential to that fertility, while minimising pollution and the amount of land needed for production.

→ **They minimize as much as possible the use of external inputs that are dangerous for human and environmental health** (antibiotics and other drugs, fertilizers, pesticides).

→ **They show solidarity with animals, and have a "shared interest" with them.** This involves treating animals well out of respect for everything we receive from them in terms of production, draught power, manure, etc., and out of respect for nature and life.

→ **They are adapted to available local resources and engaged in diversified production, particularly as part of a polyculture and livestock-farming system**, to ensure that livestock farmers have decent and respectable living conditions (even during unexpected challenges), and that their family projects meet their expectations.

Given its nature, and especially if it receives appropriate political support, smallholder livestock farming – whether sedentary or transhumant, pastoral or not – can, in both the Global North and South, draw on its modernity to address the challenges and the expectations of our societies and thus help promote the general interest:

→ **They are consistent in terms of their impact on the climate and the environment.** In particular, they : limit greenhouse-gas emissions, water pollution, and soil pollution ; help reduce fossil fuel consumption by using animals on the farm in a way that boosts work productivity and improves soil fertility (tillage, transport, organic compost, etc.) ; and sell livestock products locally as often as possible.

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They make it possible for production systems (including agricultural production systems) to transition to agroecology, and help those systems transition, thanks to better integration and reciprocal exploitation of crop and livestock-farming activities: provision of fodder resources, nitrogen supplement in feed rations, poultry feed, etc. versus organic compost, draught power and transport.

They are resilient from an economic standpoint, because being combined with polyculture, sometimes associating various species and/or making use of many different animal products and by-products, helps diversify the production of smallholder farms and helps families become better able to adapt to changes in the production environment.

They are resilient to epizootic diseases, extreme climate events, and major turbulence on the markets, because they are more diversified, more autonomous, and in most cases less intensified – in the sense of highly concentrated and dependent on highly integrated supply chains [5] – than other types of livestock farming.

They are involved in and contribute to changing cultural standards, specific to each culture and society, that define the place of animals and the relationship between humans and animals; the current trend in the Global North, for instance, is to put greater emphasis on animals and on treating animals well in production systems. Animals can only be treated well if the livestock farmers themselves are not in miserable social, economic or food situations, linked for instance to poor zootechnical performance, severe health constraints or unfair business relations.

While their performance is already remarkable, **these livestock-farming systems are far from being set in stone. They have a strong potential for change and agroecological intensification** to boost their performance, productivity and resilience to unpredictable climate, health and market conditions, while respecting the environment, animals and human health. But in order to achieve that, the political, regulatory and financial environment must allow for them to do so!

[5] The avian flu epizooties are linked in particular to concentrated livestock-farming operations governed by industrial organizations (centralised hatcheries, distant fattening units for chickens and ducks, extremely specialised production facilities)

5. For incentive-based public policies supporting smallholder livestock farms

In Europe, public policies after World War II oriented livestock farming towards a more production-driven and capital-intensive model requiring more inputs (energy, feed, fertilizers, pesticides, drugs) [6]. In France, the 1966 laws on livestock farming helped speed up the intensification of livestock farming and selection. As a result, the number of livestock farmers fell sharply. Only those able to adapt to "modern production methods" still remained. Aiming to eliminate market-protection mechanisms, the CAP (Common Agricultural Policy) – particularly since 1992 – sped up "the industrialization" of production (GMO corn and soy, widespread use of glyphosate and seeds selected for greater dependence on synthetic inputs) and helped make products of animal origin easily accessible to consumers without their noticing all of the interference that was made necessary to achieve that objective. **This policy to develop livestock farming initially participated in absorbing grain surpluses [7] and further industrialize grain production, which in turn increased the demand for grain for the development of livestock farming. A vicious circle !**

Moreover, in the management of production surpluses in the Global North, the possibility of exporting to countries in the Global South was always considered. Development and trade policies often result in surpluses from countries in the Global North (e.g. fat-filled milk powder, cheap cuts of poultry) being dumped into countries in the Global South, disrupting local production chains or hindering their development.

[6] France is now producing the same amount of milk as in 1984 with half as many cows. The cows are increasingly concentrated in the western part of the country, with a small percentage located in mountainous areas (for AOC production).

[7] Livestock-feed industries in Europe and in wealthy countries are the biggest buyers of grains by volume.

Those production and market-organization practices destabilize livestock farming in the Global South, on the one hand by introducing competition for smallholder communities, and on the other hand by creating a model that is still being imposed on the Global South, despite the fact that those practices are rarely adapted to local constraints. Some still see those practices as a symbol of "modernity", but they are largely called into question nowadays because of the disturbances they cause. Ultimately, all they're doing is undermining the reputation of livestock farming...

In many countries in the Global South, different crop- and livestock-farming systems coexist alongside one another. In Senegal, for instance, industrial livestock farming driven by private investors coexists alongside village and family polyculture and livestock-farming systems in rural areas. Often within the same village, intensive family livestock farming exists alongside extensive family livestock farming and pastoral livestock farming. States are often torn between competing demands and allow for the coexistence of different models in response to pressure and lobbying from different sectors, and even from smallholder organizations themselves. **And even when States make public policies promoting national production (mainly smallholder production), they often face the huge challenge of feeding cities, particularly large and fast-growing urban centres with a low-income population**. But given their own shortcomings when it comes to providing smallholders and livestock farmers with equal access to the resources, services, veterinary care, markets and funding they need, those same States are realising that their smallholder livestock-farming systems are not yet able to supply the quantities needed or compete with imports from the Global North that are sold at dumped prices. So they compensate by importing necessary goods and support concentrated livestock-farming systems, despite the fact that those systems are heavily criticized for their poor social and environmental performance.

The idea is therefore to take action and create the right conditions through ambitious public policies, incentivization and decentralized ad hoc public services, to help these smallholder systems – which are fully capable of evolving – reach their full potential and take advantage of existing market opportunities at local level.

Political action is therefore essential when it comes to creating a clear regulatory framework that protects all livestock farmers, without detriment to family livestock farmers, whose current and future performance is undeniable. And it is necessary for ensuring justice and social equity.

It is then a good idea to bring together all players (smallholders, technicians, agronomists, and veterinarians, as well as public authorities and political leaders) to critically examine all legislative, regulatory and policy frameworks, and design new ones in order **to promote or implement the smallholder livestock-farming systems** that we want for the future. Therefore :

1. **Breed specialization must be reviewed** in order to combat the erosion of animal genetic resources.

2. **Zootechnical criteria** must take into account the hardiness of animal populations, adaptability to difficult conditions (such as increasingly frequent droughts and extreme phenomena), the diversity of functions and services rendered by the animals, better use of available food resources to limit having to bring in external feeds and inputs.

3. **Support policies and trade rules must favour the development of sustainable supply chains that offer fair and equitable remuneration, decent living conditions for people who make their living from livestock farming**, and prices that allow consumers to have access to healthy products.

4. **In cases where they do not exist or no longer exist, public services supporting livestock farming must be reinstated, and ad hoc programmes must be funded** in order to: provide technical assistance to help livestock-farming systems transition to agroecology and intensify their agroecological practices (sustainable management of land, routes, and pastures; experimentation, training and advisory services; etc.); and offer appropriate goods and services, such as training programmes and initiatives to help community-based animal health workers (working in coordination with national public health systems for humans, and with private veterinarians) become established.

5. **Policies for land-use planning and sector-specific support must facilitate the reinstatement of livestock farming in places where it has disappeared** in order to help agricultural systems become less dependent on fossil fuels and synthetic inputs (fertilizers, pesticides), and help them transition to agroecology.

6. **A return to supply chains that make use of all animals and animal products (supply chains for wool, feathers, silk, leather, etc.) must be encouraged**. Those supply chains offer alternatives to the use of fossil resources and present opportunities to relocate certain types of production, including industrial production. They are therefore opportunities to generate revenue and create jobs in rural areas.

7. If they already exist, **eligibility criteria** for public support must be redefined, and priority should be given to the production of public goods and to livestock farming's contribution to sustainable development, by supporting **environmentally friendly projects that help crop- and livestock-farming systems transition to agroecology and that promote animal welfare and human health**.

Recommendations for promoting and strengthening smallholder livestock farms

→ For French and European public authorities

- Defend the renegotiation of free-trade agreements between the European Union and other regions around the world (particularly economic partnership agreements) that penalize livestock-farming systems in the Global South and smallholders, in order to ensure compliance with social, health and environmental standards.
- For example, exports of "fat-filled milk" powder were only possible after the European taxpayers paid for the dehydration of the milk, its skimming having already ensured the profit margin of the European industrial firms. Adding palm oil to that powder creates a product sold as "milk", even though in reality it is repurposed palm oil and is competing with dairy products produced by smallholders in the Global South.
- Substitute the Common Agricultural Policy's (CAP) current decoupled-aid mechanism with subsidies designed with the objectives of the agroecological transition in mind. Currently, aid depends little on the production methods used, and leads to a more intensive use of capital and inputs. In reality, direct aid is not aid for production but more for means of production and therefore for capitalization. This mechanism has its origin in the European vision of "export-oriented agriculture", which has so far been achieved in a way that is environmentally unsustainable and socially destructive.
- Develop support programmes and funding mechanisms to sustainably strengthen smallholder livestock-farming systems in both the Global North and South: directing aid to livestock-farming systems based on this type of model; collective management of land, routes and pasture; suitable experimentation, training and advisory services; provision of suitable goods and services (including animal health) both upstream and downstream of production, etc.
- Develop support programmes and funding mechanisms for the implementation of One Heath/Ecohealth initiatives in both the Global North and South to promote programmes supporting smallholder livestock-farming systems.
- Promote local products produced by smallholder livestock farmers for national consumption by raising awareness among the general public about the benefits of this type of livestock farming and its socioeconomic, environmental, human-health and animal-welfare effects, and promote origin labelling (markings/labels indicating country of origin, labels for smallholder and/or agroecological products, etc.).

→ For public authorities in the Global South

- Develop public policies in support of smallholder livestock farming that recognize the importance of those models for the development and sustainability of livestock-farming systems, and for addressing challenges relating to food, the environment, health and the fight against poverty in rural areas.
- Provide reasonable protection against imported livestock-farming products and by-products in order to avoid interference with the development of local value chains.
- Ensure better supervision, regulation and control over livestock-farming systems sometimes referred to as "modern", intensive or industrial, particularly in terms of their impact on the environment, animal welfare, and unfair competition with smallholder livestock-farming systems (especially regarding access to resources).
- Encourage and support policies (including local policies) for regional development, including:
  → support for investment in local processing facilities that comply with quality and cleanliness rules and that help create local jobs,
  → long-term provision of equipment for slaughter, high-quality local processing of farm products, storage and transport to local markets, etc.,
  → provision of or support for the establishment of services tailored to smallholder livestock farmers and their organizations: technical assistance to help livestock-farming systems intensify their agroecological practices (sustainable management of land, routes, and pastures; experimentation, training and advisory services; etc.); training programmes and initiatives to help community-based animal health workers (working in coordination with national public health systems for humans, and with private veterinarians) become established.
- Whenever possible and particularly when it comes to complying with mandatory quality and hygiene standards, direct public procurement towards local products of animal origin from livestock farmers' organizations produced in accordance with the principles of agroecology, particularly in catering for schools and the general public, through the proactive development of suitable specifications and procurement procedures.
- Promote local smallholder livestock-farming products for domestic consumption through awareness campaigns targeting the general public and through origin labelling (markings, labels for smallholder and/or agroecological products, etc.).
- Recognize and protect customary land rights, as well as traditional rules and norms for managing pastures. Pastoral communities should be able to gain official recognition for their customary land rights.
- Support services specially designed for mobile livestock farmers, and help pastoralists become more involved in the development of public policies.

For international organizations

- Promote and support smallholder livestock-farming systems, and help people see the benefits and effectiveness of those systems as well as their socioeconomic, environmental, human-health and animal-welfare performance, while also encouraging the least sustainable livestock-farming systems to transition towards agroecology.
- Recognize, protect and support pastoral systems and their mobility strategies, as a means of existence and of sustainably managing resources and ecosystems.
- Help agricultural systems adapt to climate change and mitigate the effects of climate change, in accordance with the Paris Agreement, by providing special support to smallholder livestock-farming systems, including pastoral systems.
- Promote and showcase, at international level, the role that grass-fed livestock-farming systems play in providing ecosystem services, particularly carbon sequestration and the provision of symbiotic nitrogen, while improving the sustainable management of biological diversity, soil and water resources.
- Develop and/or help implement support programmes and funding mechanisms to sustainably strengthen smallholder livestock-farming systems in both the Global North and South.
- Encourage policies, programmes and funding to strengthen the integration of crop and livestock farming in the promotion of agroecology in order to sustainably meet input and energy needs, particularly by making use of animal draught power and by using livestock manure as fertilizer.
- Encourage policies, programmes and funding mechanisms for the creation of long-term local health schemes within smallholder livestock-farming systems, and the operational implementation of One Heath/Ecohealth initiatives that support and are in line with those livestock-farming systems.

For consumer and producer organizations

- Promote, in both the Global North and South, responsible and sustainable production and consumption of products of animal origin produced by smallholder livestock-farming systems, and, where relevant, the development of short value chains.
- Reposition the debate on reducing meat consumption in a more global debate on improving human food consumption that recognizes the importance of a balanced diet comprising reasonable quantities of a wide range of components (animal proteins as well as carbohydrates and lipids, etc.) and that also includes a reasonable proportion of animal proteins.
- Recognize and promote, among consumers, initiatives led by livestock farmers to improve their living conditions, as well as conditions for slaughtering livestock.
- Inform consumers and regional stakeholders (in politics, education, etc.) of the importance, effectiveness and functions of smallholder livestock-farming systems, and of their resilience to unpredictable climate, health and market conditions, and their respect for the environment, animals and human health, at a time when such systems are the subject of strong scrutiny and criticism, and divisive debates that sometimes fail to take into account all sides of the issue.

References

EGA EGGA PROJECT

→ Pastoralism and combating desertification in northern Senegal

Restoring the pastoral ecosystem of land in the Ferlo region, and helping 2,000 agropastoral families adapt to unpredictable climate conditions: joint development plan, pastoral water system, early-alert system, regeneration of vegetation, promotion of biogas and income-generating activities.

SUSTAINABLE CASHMERE PROJECT

→ Sustainable cashmere in Mongolia : integrated production system

Supporting the production and enhancement of cashmere in environmentally friendly conditions, by 110 nomadic pastoralist groups (4,500 families) from 7 soums in Bayankhongor province.

ONE HEALTH PROJECT

→ Animal health and public health in Cambodia

Implementing preventive measures for health and medicine to protect human and animal health, targeting 1,000 families in 7 villages in the Prey Veng province.

LETAGOGO PROJECT

→ A local dairy supply chain in Haiti

Supporting the milk production of more than 100 small-scale livestock farmers in the Central Plateau, and the proper governance and financial management of a mini-dairy that supplies small boutiques and schools under Haiti's National School Cafeteria Program.

LIVESTOCK FARMING IN TIMBUKTU PROJECT

→ Livestock farming and animal health in Timbuktu, Mali

Supporting 40 agropastoral organizations and 400 families that produce bourgou, offering training for 50 livestock-farmer relays for a grassroots veterinary service, setting up mobile teams offering health services for humans and animals, and helping vaccinate ruminants in pastoral areas.

NGALU REWBÉ PROJECT

→ Supporting female livestock farmers in Senegal's Matam region

Supporting the emancipation of more than 200 vulnerable women through the development of sheep-fattening activities and professional-training programmes in the Matam region.

VÉLINGARA DAIRY PROJECT

→ Smallholder dairy production in southern Senegal

Strengthening the capacities of 1,000 Vélingara livestock farmers in the production and sale of milk, and strengthening the processing capacities of 5 small dairies.

For more information on all AVSF's projects

▸ww.avsf.org

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As a French association that promotes international solidarity, Agronomes & Vétérinaires Sans Frontières (AVSF) has been working with smallholder communities and organizations in developing countries for over 40 years to address food-related issues. We provide them with the professional skills they need in agriculture, livestock farming, and animal health: technical and financial assistance, training, access to markets, etc. AVSF carries out over 60 cooperation programs in 20 different countries in Central and South America, Asia, and Africa, working with smallholder communities where crop and livestock farming are essential to ensuring food security as well as social and economic development. AVSF is an officially recognized non-profit association in France.

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