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LIVESTOCK 2.0. LIVESTOCK FAMILY FARMING SYSTEMS



- According to VSF-Belgium, in a family farming production system, the social relationship is at the core of decision making. The decisions are based on economic, social and environmental criteria and economic profit does not overshadow the other dimensions.
- Livestock family farming systems exist all over the world and sustainably produce livestock products. They improve resilience against external economic, financial and environmental shocks such as climate change and provide a sustainable alternative to factory farming.
- Livestock Family farming systems should be increasingly supported through domestic agricultural policies and development aid and thus should be at the center of the debate on how to feed the world.

In the global South, hundreds of millions of people depend on their animals to assure their livelihoods. Animals such as pigs, sheep, chickens, camels, cows, goats, ducks and guinea pigs are most important in their everyday lives. The animals have several functions and are not mere producers of meat and milk. Besides food they also provide an income, as the animals and their products such as meat and milk - but also hides and skins - are sold on national, regional and international markets or traded for other food stuffs. They form important assets when it comes to social status and savings.

According to the FAO, the number of poor people depending on livestock rearing to assure their livelihoods is estimated at 987 million people or about 70% of the 1.4 billion people living below the poverty line (FAO, 2009). These animals are essential for the food and nutritional security of these people. They are reared following different production methods that can be referred to as family farming. Family farming exists both in the North and the South. In Europe, for example, family farmers produce milk and meat. Though their number is declining year after year, they remain important for European agriculture. Their number in the South however is still very high and the majority of the locally produced milk and meat comes from family farming systems. It might seem strange to consider that both in the North and the South types of sustainable family farming exist and that they are facing common challenges and solutions. Thus it must be clarified by VSF-Belgium what the organization means by family farming in North and South.

Therefore this policy brief outlines what the organization means by family farming in the livestock sector and how it provides solutions for global challenges such as climate change.

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Currently, there are about 1.5 billion men and women farmers working on 404 million family farms of less than 2 hectares (McIntyre, et al, 2009), 410 million farmers gather the hidden harvest of forests and savannahs (ETC, 2009), between 120 and 200 million people are pastoralists (Maennel, A., et al. 2014), 100 million are small-scale fishers (Kura et al. 2004) and 370 million belonging to indigenous communities (IFAD, 2009) with a great majority of them engaged in agriculture (Maass-Wolfensen, K., 2013). In addition, 800 million people are growing urban gardens (World Watch Institute, 2007). These data illustrate the importance and presence of family farming in the world. As mentioned in the above, it is necessary to first define what this term implies according to our organization.

In family farming systems, **“Family”** in a broad sense, is at the heart of the production system. There is a structural link between the economic activity and the family structure as the employees on the farm usually share a “family”-link. This relationship influences the decision making process, the organization of the farm, the production management and the handing down of the farm as an inheritance. The family is at the same time the owner of the land, the worker and the decision making unit (VSF-Europa, 2012). This has a profound impact on the nature of the production system and includes the importance of specific values such as solidarity, continuity and commitment. In family farming systems, farming is more than a job, it refers to a lifestyle based on culture, beliefs and traditions about living and work.

In family farming systems, production therefore is not only driven by market demand and profit, but also by other dimensions of the production process, such as its socio-economic and environmental impact. These environmental and socio-economic considerations may impact decisions in such a way that they will change the final outcome, which would not have happened, had only the economic aspect been taken into account. Decisions might not be taken because they don't benefit one or more of the sustainable pillars. In sustainable family farming systems, farmers play an active role and recognize their responsibility, linking up consumers' demand with the environment and the socio-economic interests of “the family”. These family farming systems exist on a global scale and are also used to rear animals. These animal rearing systems - as a part of family farming systems - are often referred to as small and middle scale livestock farming systems. In large scale livestock farming systems, often referred to as industrial production systems, the economic driver to rear animals likely dominates the socio-economic and environmental considerations. According to the FAO, industrial systems are those that purchase at least 90% of their animal feed from other enterprises (FAO, 2009). They often consist of a single species (such as poultry) which is fed

on animal feed and not on byproducts from the harvest or by grazing. The opposite situation is often found in small scale and middle scale production systems.

LIVESTOCK FAMILY FARMING SYSTEMS

In the majority of family farming systems in the world, animals have a predominant place. According to the FAO, the majority of the rural poor keep animals that contribute significantly to the family economy (FAO, 2009). Keeping animals in family farming systems is not limited to the global South. In the North, livestock family farming systems exist as well. According to a speech held by the European Commissioner for Agriculture Dacian Cioloș in 2013, at that time in the European Union there were about 12 million family farms, working on 172 million hectares of land and employing about 25 million people (European Commission – Press release

database, 2013). It is fair to assume that a big part of them also keep animals. Concerning milk production for example, the majority of the milk in Belgium (98%) is produced on family farms (European Union, 2013). However, this is not the case for all milk production systems in Europe.

Central to all livestock family farming production systems is that animals have several functions and are not mere producers of food products. This different conception of animals differentiates livestock family farming from industrial livestock farming. In a family

farming system, animals not only provide milk and meat, but are also important for crop production. Animals are used for traction, to plough the land and assure the transport of the harvest. Thanks to these methods, crop yields go up. According to CIRAD, about 250 million animals are used to work the land of nearly half of all family farms. They provide an important savings on fossil fuels (CIRAD, 2012). Animals are also pivotal to fertilize the soils: manure is used to fertilize crops. This natural fertilization reduces the need to use chemical fertilizer, an important source of greenhouse gases causing climate change. The social aspect of rearing animals must be stressed as well, since the animals often represent the savings of the family. Globally, livestock family farming systems refer to a huge variety of production systems going from extensive pasture production systems over backyard pig and poultry keeping to irrigated and mixed production systems.

Extensive pasture production exists on a global scale. It is very difficult to measure the exact number of pastoralists in the world due to their constant mobility. It is estimated that the number of nomadic and transhumant pastoralists may vary between 100 and 200 million people globally (Maennel, A., et al. 2014). If we were also to take into account the extensive agro-pastoralists, their number would be much higher: In Sub-Saharan Africa for example, in 2006 pastoralists and agro-



pastoralists accounted for 50 million people, about 18% of the total population (Rass, N. 2006). In some countries, such as Mauretania and Somalia, they are actually the majority of the people. Pastoralists exist in the South and also in the North. In Southern Europe for example pastoralism is still practiced in countries such as Spain, Greece, Romania, France and Italy. Pastoralism therefore is also a part of the EU's Common Agricultural Policy. In some cases, such as in France for example, policies derived from the CAP exist to specifically target pastoralists (EFNCP, et al. 2011). A pastoralist production system is defined as a system where at least 90% of the total dry matter fed to the animals comes from pasture (FAO, 2011). For pastoralists, the herd is very important to assure their livelihoods: selling animals and related products, is their main source of income.



Next to extensive pasture production or pastoralism, there is also a second type of livestock family farming systems which are referred to as "backyard pig and poultry keeping". In these systems, families usually keep some livestock, for example ducks, pigs or small ruminants, literally in their backyard (Rivera-Ferre, et al. 2012). It refers to a whole set of systems that generate low output but require very low input. Often the animals are only fed food scraps and transform them into milk, meat and eggs.

A final category of livestock family farming systems is often referred to as rain fed or irrigated mixed farming systems. Most milk production in family farms in Belgium for example is a part of this category. In these family farming production systems, more than 10% of the dry matter fed to the animals is grown at the farm and more than 10% of the income of the farm comes from activities not related to livestock keeping (FAO, 2011).

WHY SUPPORT (LIVESTOCK) FAMILY FARMING?

There are several reasons to support livestock family farming compared to factory farming. First of all family farming provides the livelihoods for about 1.5 billion people (McIntyre, et al. 2009). Also, according to the FAO, smallholders provide up to 80 percent of the food supply in Asia and Sub-Saharan Africa (FAO, 2012). At the same time, very little public funding seems to be directed to this type of farming, whether it be in Europe (through the Common Agricultural Policy) or in the South (for example through national budgets of Southern countries but also through development aid). This is remarkable, especially considering that the amount of worldwide subsidies going towards large-scale, factory-type farming systems seems to be much bigger than the funding going to family farms, even though family farming systems have proven to be very resilient against **external economic and financial shocks**.

Maryam Rahmanian, member of the High Level Panel Experts of the Committee on World Food Security, recently discussed the subject at an international conference on small scale livestock farming and climate change, organized by Vétérinaires Sans Frontières Europa in 2013. She mentioned that in Europe, industrial type farms encountered increasingly more difficulties when coping with the current economic crisis. Family farms are much more protected against these crises

and therefore form a stable alternative to these methods of mass production. Family farming does not only focus on economic profit, but also puts environmental and socio-economic interests at the heart of decision making, leading to diversification on the farm. This diversity makes family farming more resilient against financial crises for example.

There is also much less need to invest large amounts of money to boost production, neglecting the other pillars of sustainability. The tendency to overstretch capacities is less likely and therefore external economic and financial shocks will probably not hit them hard. Family farms also provide an important economic relevance since they provide jobs and they halt rural exodus in the South. Because these systems are rather labor intensive, they employ a huge amount of people and therefore improve livelihoods substantially. One of the consequences of the Greek economic crises for example, was that people returned to the countryside and started farming.

Family farming is also more resilient towards **environmental** challenges. Regarding climate change for example, numerous reports state that the livestock sector is responsible for climate change and causes between 15%-18% of greenhouse gas emissions (Rivera-Ferre, et al. 2012). Feeding the cattle with imported protein-rich fodder; stocking large amounts of manure and transporting cattle over long distances, lead to the emission of greenhouse gases. These methods can be found in most industrial farming systems. In most family farming systems however, production is much more attached to its environment. Regarding climate change for instance, considering the entire production cycle of pasture fed cattle including the potential of carbon sequestration through grasslands and the reduction of greenhouse gas emissions thanks to the use of manure as natural crop fertilizer; livestock family farming emits much less greenhouse gases. As the typology of livestock family farming systems above illustrates, it is much more linked to the environment: depending on grazing grounds, local fodder and food scraps, etc. Livestock family farming therefore can provide an alternative to industrial livestock farming.

Livestock farming can protect the world's biodiversity as well. Industrial livestock farming systems tend to focus exclusively on the most productive breed. In fact, according to the FAO

75% of the world's food is generated from only 12 plants and 5 animal species (FAO, 2012). Livestock family farmers however, cope with environmental constraints and protect natural resources: they preserve local breeds and not just the most productive ones. Family farmers tend to rear traditional breeds that are more resistant to diseases and drought and have a higher nutritional value.

Due to its nature, family farming also inhabits the **social** dimension of sustainability. As previously mentioned, family farming is based on "family", in a broad sense. It is based on a social connection between all of those involved in the production process. The production process is also much shorter because consumers and producers are almost directly in contact with each other. In general, small scale livestock production systems provide high quality products. The farmer is directly responsible for the quality of the product and is therefore accountable to his personal clientele. Concerning animal rearing and livestock, this social dimension of livestock family farming in the South refers to the importance of animals for social status and for particular ceremonies such as weddings for example where animals are used to pay the dowry.

Nevertheless the economic viability and social and environmental contributions of (livestock) family farming

are under pressure due to globalization and integration into common economic areas. Family farmers in the South should be supported to produce for local markets but are instead obliged to either migrate to urban areas - where they are often destined to join the millions of people living in shanty towns because of a lack of urban jobs - or they can choose to continue farming but only for themselves (= self-subsistence farming) or for the world market, which would mean a transformation in larger units to compete with large industrialized farms. The latter is not even a real option in the South, considering that transforming into larger production units would require a big investment which they simply cannot afford. In countries in the North, some family farmers do decide to invest and transform their farms in industrial farms. They often borrow large amounts of money to do so and are unsure of being able to reimburse the loans. The importance of family farming and the need to have policies that put family farming at the center of the global food system is also recognized by the United Nations who declared 2014 as the International Year of Family Farming (FAO, 2014).

References

- CIRAD (2012). Elevage et pays du Sud. 16p. • ETC. (2009). Who will feed us? Questions for the food and Climate Crises. 34p. • European Commission – Press release database (2013). L'agriculture familiale : pour une agriculture plus durable et plus compétitive en Europe et dans le monde. Speech during a Conference on «Family farming: A dialogue towards more sustainable and resilient farming in Europe and the world» on November 29, 2013 in Brussels • European Forum on Nature Conservation and Pastoralism, et al. (2011). The truth behind the CAP: 13 reasons for Green reform. 35p. • European Union (2013). EU dairy farms report 2012, based on FADN data. 188p. • FAO. (2009). The State Of Food And Agriculture. Livestock in the balance. 168p. • FAO (2012). Smallholders and family Farmers. 4p. • FAO (2014). Family Farmers. Feeding the world, caring for the earth. 4p. • Maas-Wolfensend, Karla (2013). Coping with the food and agriculture challenge: smallholders' agenda. Preparations and outcomes of the 2012 United Nations Conference on Sustainable Development (Rio+20). Natural Resources Management and Environment Department Food and Agriculture Organization of the United Nations. 50 p. • Maennel, A., et al. (2014). The Meat Atlas. Publication by the Heinrich Böll Foundation and Friends of The Earth Europe. 68p. • McIntyre et al. (2009). Agriculture at a Crossroads: The IAASTD Global • Report. IAASTD and Island Press, Washington DC, U.S.A. 106p. • Rass, N. (2006). Policies and Strategies to address the vulnerability of Pastoralists in Sub-Saharan Africa. FAO, Pro-Poor Livestock Policy Initiative Working Paper 37. 102p. • Rivera-Ferre, M.G., Lopez-i-Gélats, F. (2012). The role of small-scale livestock farming in climate change and food security. VSF-Europa. 146p. • VSF-Europa (2012). Small Scale livestock Farming and Food Sovereignty. 17p. • World Watch institute (2007). The State of the world. Our Urban Future. 250p.

IN CONCLUSION

Family farming deserves more support, since billions of people in both North and South depend on family farming to assure their livelihoods. Their way of living is threatened by an increasing globalized food production and consumption system. In family farming systems, families are at the heart of decision making and make joint decisions on the production of food stuffs. This has a huge impact on the production system and decisions are not only based on profit, but socio-economic and environmental criteria are also taken into account. Concerning livestock production, different types of livestock family farming systems exist throughout the world. Going from Asia to Africa, over Europe and Latin-America, smallholders rear animals on family farms to provide an income. Their different production systems are likely to be more resilient to economic and financial shocks than their factory-type alternatives and they provide clear environmental benefits. Family farming is essential in protecting and maintaining biodiversity and to assure access to quality food. Thus, thinking about family farming should be at the center of designing food and agricultural policies. Unfortunately, due to restrained visions on food production and consumption that often do not consider all pillars of sustainability, agricultural policies - whether national or international – are all too often focused on maximizing profits and not enough on feeding the people. Thinking about how to feed the world however, should be inspired on how family farming systems can become a more predominant part of national, regional and international development and agricultural policie.

