

Caritas

Austria

Livestock keeping in international programmes of Caritas Austria

Framework paper



2 ZERO HUNGER





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1. Introduction

Food security of people in the poorest countries of the world, which contributes to the 2nd UN-Development goal (SDG2), is a focal point of Caritas International Programmes. Animal farming within in the context of smallholder agriculture has great significance in the projects and programmes of Caritas Austria – it is a means for significantly and lastingly improving the nutritional situation of people in partner countries. With regard to this focal point, Caritas supports 40 programmes that include livestock.

The aim of this paper is to illuminate the background of livestock keeping in developing countries and to clearly state Caritas Austria's position regarding the keeping of animals. In particular, the following questions shall be clarified:

- How does Caritas Austria ensure sustainable and species appropriate animal keeping, that holds the biggest possible benefit for the farmers without substantially straining the environment, within their project „Future without Hunger“?
- Which measures does Caritas Austria recommend and support in terms of choice of animal, animal keeping, feeding, animal health and the effects of livestock farming on the environment?

In his encyclical „Laudato Si“ Pope Francis advocates for species-appropriate livestock farming: „Still, it would also be wrong to think that other living beings may be regarded as mere objects that are subject to the arbitrary rule of men. Regarding nature solely as a means for profit and interest, brings serious consequences for our society. “

2. Background: Livestock keeping in developing countries

2.1. Drawbacks and challenges

Due to population growth, urbanisation and increasing prosperity, the demand for animal derived food is growing in developing countries. However, livestock keeping can have a serious impact on society and the environment. To prevent causing even greater environmental damage through increased animal production in the future, the negative effects must be limited.

Good agricultural practices can prevent consequential damages to the environment and to people. Negative effects of livestock keeping such as destruction of pasture land, emission of greenhouse gases, competition for food and water mainly concern intensive, conventional livestock farms that produce on a large scale and are the main reasons why small-scale agriculture or livestock farming is preferable to industrial production.

However, livestock farming in poor, often tropical countries faces further challenges that need to be considered. For example, highly bred breeds are often preferred despite poorer suitability, while local breeds are not sufficiently available on local markets. Free-range animals can lead to conflicts between farmers and livestock owners; stable farming is often unusual and therefore little knowledge is available. Vaccines or necessary cooling facilities are often difficult or impossible to obtain. The access of the animals to water, e.g. at animal watering places, must be ensured. Overgrazing must be avoided, especially in view of the effects of climate change, by providing alternative feed.

2.2. Reasons for livestock keeping

For many people in developing countries, animal farming is the basis of their livelihood and an important economic factor: Approximately one billion people worldwide, who live in poverty (<\$2 per day), are dependent upon keeping animals. 60% of them operate a mix of agriculture and animal farming. Animal farming provides small farmers with food and makes an important contribution to their household income (20-50%), especially for poor households. For animal owners, livestock is an important asset and a way out of poverty, especially for women because it can help them gain additional income. Two thirds of the world's impoverished animal keepers are women. In pastoral and agro-pastoral families, milk is normally consumed by all family members as a supplement to grain based food. Despite their dependence on livestock, agro-pastoral households consume comparatively less meat than the population in industrialized countries. The reasons for livestock keeping vary and fulfill numerous functions within a community:

- Food supply (for the purchase of grain as staple food, milk, eggs and meat)
- Economic reasons (income, capital reserve, reserve for special occasions, economic status)
- Usage in the household (source of raw materials, clothing, means of transportation, work appliances, manure / fertilizer production)
- Socio-cultural function (social status, prestige, bride allowance, honoring a guest, celebrations or offerings)

2.3. Selecting animal species and breed

Many factors (economic, geographical, socio-cultural, environment) need to be considered in the decision which animals to choose. In the planning phase, considerations should be made about the following questions:

- What function does animal keeping fulfil for the family: Food production and / or income generation?
- How big is the effort for the production (feed, water, stable/pasture, animal health)?
- Are the necessary resources available (feed, land, pasture, water-rights)?
- What illnesses could occur and how may they be prevented?
- Which animals and resulting products can best be used and / or marketed under the given circumstances?
- How big is the contribution to the family income?
- Which risks are connected to the keeping of individual animals?
- What knowledge do families have, what technical knowledge must be transmitted?

Choosing the right breed may be difficult and, therefore, needs to be considered in a differentiated manner. Local breeds are to be preferred in many cases. They are better suited to the environment, but often have a lower performance potential (e.g. milk production) than "exotic" breeds from temperate climate zones. In areas that have problems with infrastructure (no veterinary system, access to markets etc.) the keeping of local breeds is definitely preferable. Local animal breeds have the advantage of being better adapted to the environmental conditions of tropical regions than exotic breeds. Nevertheless, the number of local breeds is decreasing sharply, since the introduction of exotic breeds is now carried out frequently through crossbreeding programs. In peri-urban or urban animal farming, the use of crossbreeds can make sense. However, care must be taken to determine which exotic breeds are used for crossbreeding.

2.4. Ways of livestock keeping

In general, there is a distinction between:

- Extensive animal farming – pasture farming
- Intensive (conventional) animal farming – especially in industrial countries
- Ecological animal farming – free range with outlet, 95% organic feed

Animal farming is internationally divided into the following **systems**:

- Only animal farming (90% of the agricultural production)
- Animal farming in integrated agriculture (holistic Ansatz)

All systems have advantages and disadvantages which, depending on climate zone and ecosystem, have varying effects on animal health, wellbeing and performance. Integrated

land use systems are preferable wherever possible, since they offer the possibility to utilize waste e.g. animal manure for fertilization in agriculture or harvest residues as animal feed.

2.5. Feeding and water

In development countries there is often no free access to water and feeding sites for the animals. Particularly the available and sustainably usable grazing land, feed production and storage, as well as the water supply of farm animals are crucial. The advancing climate change also has serious implications for forage crops and grazing grounds, often causes conflicts while also affecting other aspects of animal farming, such as heat stress, increasing demand for water, livestock threatening diseases, disease transmission, or declining biodiversity.

2.6 Animal health and animal protection

Nowadays, it is inevitable to adjust to international standards on animal health and animal protection. More and more countries in the south are now introducing stricter laws and regulations for animal farming. These standards are unknown to the majority of animal owners in the partner countries of Caritas Austria, who produce for their subsistence or for the local market. Therefore, it is important to raise awareness for the (economic) benefits and reasons for improving animal welfare - such as the fact that improved methods of animal farming increase the productivity and survivability of animals, or that the implementation of improved standards can bring advantages over other producers. In addition, investments in animal welfare cost relatively little, but can generate lasting improvements. Animal welfare issues are often not a priority, especially for poor animal keepers, because the lack of financial resources means that high-quality feed, suitable stables, equipment or veterinary services pose a major challenge. Due to economic pressures, pack animals or work animals may also be used if they are injured or sick. Due to the lack of veterinary care, injuries and dehydration often go untreated. Since livestock is an essential asset for the poorer sections of the population in countries of the South, it is all the more important to address animal health and animal welfare.

2.7 Livestock keeping in disaster situations

With **slow onset disasters** that demand a reaction with regard to animal farming, the most common threat in arid and semi-arid areas are droughts. Droughts initially lead to a deterioration in the physiological state of the animals. In later phases of the drought, farm animals often die from diseases and epidemics, as well as lack of food and water. The course of a typical drought is characterized by four phases: *warning, alarm, emergency and recovery*. Once this has passed, there is a slow return to the "normal state". The needs of animal keepers are different in every stage. In the warning and alarm phase, for example, the productivity of the animals decreases, but their essential assets are not yet lost. Therefore, the priority in this phase is to protect the assets of the animal owners and at the same time promote the family's food security. In an emergency situation, the priority is to ensure the well-being of people, i.e. the survival of those affected. Furthermore, the assets of the animal owners should be protected as much as possible.

Rapid-onset disasters (earthquakes, extreme weather conditions, or the associated repercussions such as flooding and landslides) generally have sudden negative effects on animal farming. The affected population groups often cannot stay in their usual locations and may have to leave their animals behind or a family member may even stay behind with the animals at great risk. Guaranteeing the well-being of people is a priority here as well.

Complex disaster situations are often the result of poor governance or prolonged conflicts and can also be additionally complicated by natural phenomena. This can have the following effects:

- Displacement and a possible loss of livestock and / or restricted access to natural resources such as grazing land;
- Violent robbery of animals by armed groups;
- Disruption of veterinary services;
- Restrictions on management and marketing;
- Breakdowns of communication and infrastructures that provide only limited access to information or markets.¹

¹ LEGS, 2009

3. Positioning and practice

3.1 Livestock keeping in general

The focus is on supporting diversified smallholder agriculture that serves the family's food security as well as the improvement of their income situation. Mass livestock farming and animal keeping for reasons of prestige do not correspond with Caritas Austria's sustainability concept and are not being supported. We support biological animal keeping; however, we are aware that in the future eligibility for certification will still remain a big challenge in the countries we work in.

In international programmes, **Caritas Austria supports:**

- Agricultural activities and livestock keeping in smallholder families
- Agriculture and animal farming to support food sovereignty
- Sustainable and species-appropriate animal keeping, that holds the biggest possible benefit for the farmers
- Agriculture and animal farming which enables farmers to go beyond self-sufficiency towards commercialising of livestock, thereby strengthen the families' resilience
- Diversification of agriculture, through positive synergies with animal farming
- People with a nomadic lifestyle (remaining that way or transitioning to settledness)
- Protection of animals in humanitarian emergencies to stabilise peoples' livelihood (Protection of Livelihoods)

3.2. Specific aspects of livestock keeping

3.2.1 Environment

Caritas Austria particularly supports integrated systems that allow for a positive interaction between agriculture and animal farming; for example, the cultivation of high-quality forage grass, the utilization of surpluses or crop residues as animal feed, composting or the output of dung onto agricultural areas.

In practice

Within agricultural projects with farm animals, Caritas supports integrated agriculture systems. The animal manure is used as fertilizer and waste or agricultural surpluses are used as animal feed. The farmers are encouraged to not let their goats and sheep roam freely anymore, but to keep them in enclosures where they are supervised and fed. Especially in arid and semi-arid areas, it must be ensured that the animals do not eat the entire biomass, because it is necessary for the development of soil fertility. The goal is to switch from a breeding attitude towards an attitude for fattening or, where feasible, milk production.

3.2.2. Choosing animal species and breed:

Farm animals kept in projects should be suited to the ecosystems and enable the animal owners to generate sufficient yield with as little allocation of resources as possible. Therefore, the focus is on local animal species and breeds, which can be kept using traditional knowledge, methods and local resources and which do not additionally burden fragile ecosystems. Crossbreeding as a measure to refresh the gene pool is a possible step to improve the results and react to changing environmental conditions. Multi-use use is preferred, e.g. to enable both meat and egg production. The use of hybrid breeds (for poultry) is only supported restrictedly, in specific applications. They may only be employed after careful examination of the respective requirements. The aim is also to promote smaller herds with healthier and more productive animals.

The potential of local breeds should be evaluated and programmes for their preservation developed if applicable. If exotic breeds are introduced, the scarce resources can become problematic for these animals, which can result in poor performance and, in the worst case, even the death of animals. In order to introduce improved breeding animals, certain framework conditions must be met, e.g. favourable climatic conditions. Local breeds have the advantage of being suited to the ecosystem.

In practice

The families themselves decide which animals should be bought for them (goats, pigs, donkeys, sheep or chickens). Often the result is reached by a process within the community. In some projects, new animal species that are seldom used locally, but have a good cost-benefit ratio, are selected in a test phase.

For goats and sheep, local breeds that are available on the market are acquired. For chickens, new breeds are being used predominantly, as local breeds are often not available. Farming families who want to specialize in egg production often have a request for a productive breed of laying hens. In this case (hybrid) laying hens (mostly Bovane / Leghorn brown) are also allocated.

An essential aspect of animal farming in Caritas Austria projects is that the animals are not given away but are "subsidized". Usually about a third of supported farmers receive 1-2 animals. The first-born female animals are given to other farming families, who in turn pass on an animal, so that after about 3 years, all farming families supported in a project have animals.

3.2.3 Ways of keeping animals

Ways of keeping that support animal well-being are preferred. Knowledge transfer on animal welfare is supported and stress factors throughout rearing and up to transport and slaughter should be avoided as far as possible.

In practice

The types of keeping animals within the projects depend heavily on local conditions. Barn keeping is not common among small farmers in the project regions, i.e. in many cases the animals roam freely. They are often kept in enclosures that are built by the families before they receive the animals. When keeping chickens, the construction of a stable or enclosure is a requirement. Goats are often kept in small kraals with at least 2.5 m² of space for movement per full-grown/adult goat.



Figure 1: Animal farming in Kralen is often an innovation, as shown here in the PRASA programme in Congo

3.2.4 Feeding

Farm animals should be fed appropriately and sufficiently. The use of growth-enhancing hormones and non-essential feed additives is not being supported. Equally, the use of genetically modified animal feed and plant protection agents for feed production is not supported.

In practice

Ideally, animal feed is planned as a separate project component (i.e. promoting the cultivation of feed, efficient utilization of feed or roughage, measures to reduce the burning of biomass). Feed that is locally grown and available is used almost exclusively. Feed production that does not compete with food production is supported, e.g. cultivation of forage trees and grasses, waste products from the milling (bran), crop residues, legume straw (beans). Termites, snails and dried fish waste are used as protein suppliers for semi-intensive poultry farming.



Figure 2: In the "Pradur" project in Burundi, goats receive the locally available fodder grass from the farmers.

3.2.5 Animal health and welfare

Welfare and health of farm animals is important to support smallholder farmers in their livelihood. Animal protection should be considered, but the well-being of the people is paramount. Measures to support animal health (hygiene, feeding, care, etc.) are being supported. Particularly in small-scale animal and agriculture farming, it may be necessary to use medication to avoid losses that threaten the very existence of the farmers. Therefore, the use of vaccines and medicine is supported to protect livestock and their keepers from diseases. Extensive, preventive use of medication (e.g. antibiotics, growth hormones) however, does not correspond with the principles of sustainable animal farming and is therefore not promoted.

In practice

Generally, animal owners are not familiar with the basic needs of the animals. The animals given to the families are vaccinated in advance. Before the animals are acquired, the families are trained in animal health, animal welfare and nutrition. Occasionally, there are also vaccination campaigns for the entire project region, which are carried out in cooperation with local authorities. Another measure is the training of animal health advisors living in the village communities.



Figure 3: In the "Goats for Widows" project in Burundi the animals receive a vaccine before they are handed over to the families.

3.2.6 Emergency aid

In emergency aid, Caritas recommends using the SPHERE Livestock Guide. In the event of slow-onset disasters, animals must be protected in the phase of warning / alarms according to the "do no harm" principle (protection of livelihoods). Destocking (deliberate reduction of livestock before the animals perish or are no longer fit for sale) and restocking are the core measures in emergency aid, especially in the case of slow-onset disasters such as droughts. Destocking measures enable animal owners to either free up capital for other needs or to have meat for their own nutrition and / or to protect the rest of the herd, as more feed for less animals is made available. The reduction is attained through sales (accelerated livestock off-take, commercial destocking) or slaughter (slaughter destocking, slaughter for disposal). The crucial factor is timely intervention in the respective phase of the disaster. In emergency situations, slow-onset as well as rapid-onset ones, it is a priority to ensure the survival of the affected people and in the next step to protect the assets, in this case the animals, of the affected people (protection of livelihoods). Disaster preparedness can already take place during the rehabilitation after catastrophes: through adequate increase of animals and sensitive reappraisal of cultural practices (keeping large herds of cattle as a sign of wealth).



Figure 4: Distribution of goats after the devastating typhoon Haiyan in the Philippines in 2014. Families whose farm animals were lost due to the storm were supported by restocking in this "Early Recovery" project

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