

## 6 Animal Husbandry

### 6.1 Keeping Animals

#### Introduction

Integrating animal husbandry into crop producing farms is one of the principles of organic farming. In temperate and arid zones, animal husbandry plays an important role in the recycling of nutrients, while it is less emphasised in the humid tropics.

The caring, training, and nurturing of animals is considered an art in many farming communities. It is a strong tradition among pastoral communities such as the Massai in Kenya or the Fulani who live in most Sahelian countries. In these communities, animal husbandry is a mainstay in rural activities.

Animal husbandry in organic farming is different from both extensive animal husbandry, which is often environmentally damaging (e.g. overgrazing of common lands), and from intensive animal husbandry which keeps animals under ethically unacceptable conditions.

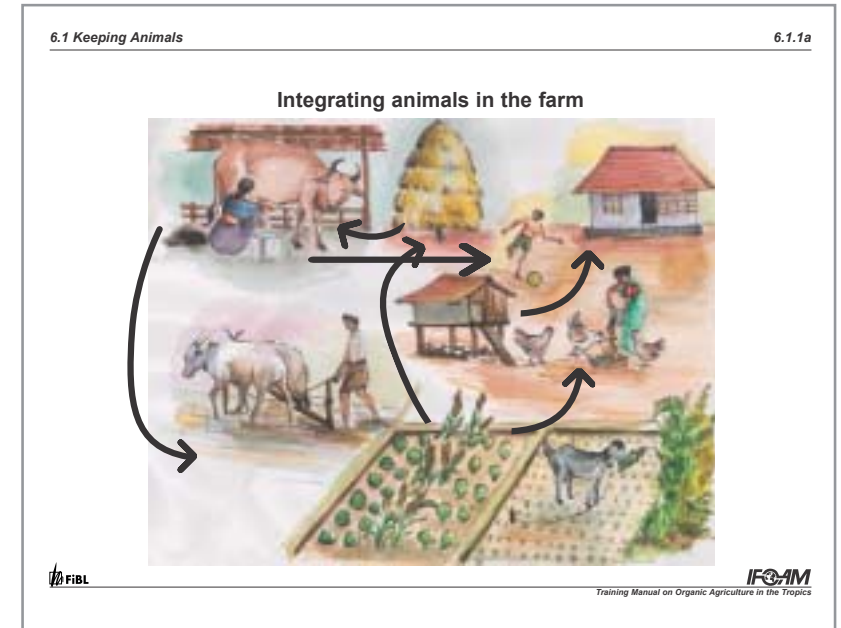
#### Lessons to be learnt

- *Farm animals can have many functions on a farm, but not all farms are suitable for keeping animals.*
- *Organic animal husbandry puts a central focus on the welfare and health of the animals.*
- *In order to obtain a sustainable farming system, it is crucial to select the right kind and number of farm animals.*
- *Sheds and beddings must be developed in a way to ensure the welfare and health of the animals.*

## 6.1.1 The Role of Animal Husbandry

### Integrating animals into the farm

Integrating animals into a farm can help to recycle nutrients. By-products such as straw, biomass from field margins or kitchen wastes, can be used as cheap and easily available fodder. At the same time, the dung should be returned to the fields in the most efficient way in order to increase the fertility of the soil. Animal products such as milk, eggs, and meat can both be used for the family as well as for selling, thus generating income for the farmer.



Transparency 6.1.1a: Animals integrated into the farm, showing the flow of fodder, dung and products.

### Planning: Designing a system

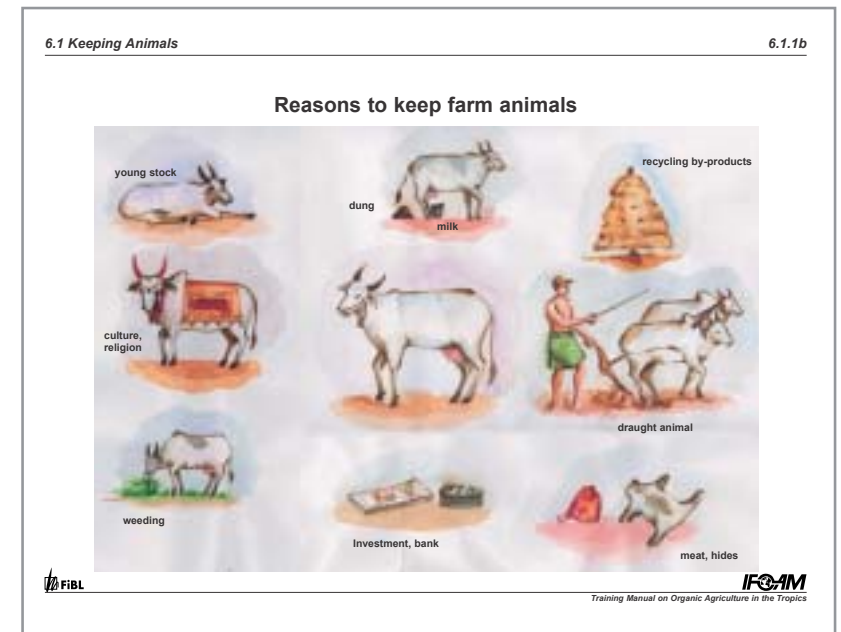
Use a large black board or paper sheet to draw an integrated farm system suitable for the region. Start with some main elements of a typical farm such as the farm building and the fields with typical crops. Ask the participants to join in the drawing: which animals could be integrated, what shall they feed on, how to keep them, how to use the dung, what are their products? Let participants illustrate their suggestion in the drawing. Discuss each suggestion as well as the final result.

## Reasons to keep farm animals

Many farm animals have a multi-functional role. They can:

- Produce dung which is of great importance for soil fertility.
- Yield products such as milk or eggs for sale or own consumption continuously.
- Recycle by-products such as straw or kitchen waste.
- Serve as draught animals for tillage or transport.
- Produce meat, hides, feathers, horns etc.
- Serve as an investment or a bank.
- Help in pest control (e.g. dugs) and weed management (e.g. grazing on barren fields).
- Have cultural or religious significance (prestige, ceremonies etc.).
- Produce young stock for breeding or sale.

The significance of each role will vary from animal to animal and from farm to farm. It will also depend on the individual objectives of the farmer.



*Transparency 6.1.1b: A cow is not just a cow! Farm animals can have many functions for a farmer.*

### **Discussion: Role of animal husbandry**

*Which roles do farm animals serve in the farms of the region? What are the reasons to keep animals? Which other functions could be utilised in addition?*

## Making a decision on animal husbandry

There are several reasons for taking up animal husbandry as a part of your farming activities or even as the main one. There are also a number of critical aspects to be taken into consideration. In order to make a decision on whether and how to get involved in animal husbandry, you should ask yourself a number of questions:

### *Is my farm suitable?*

Do I have sufficient space for shedding and grazing, sufficient fodder or by-products to feed, sufficient know-how on keeping, feeding, and treating the specific kind of animals?

### *Will the animals benefit my farm?*

Can I use the dung in a suitable way? Will I get products for my own consumption or sales? Will the animals somehow affect my crops?

### *Can I get the necessary inputs?*

Is sufficient labour available within or outside my farm? Is enough fodder and water of good quality available throughout the year? Will remedies and veterinary support be available, if needed? Can I get suitable breeds of animals?

### *Will I find a market for the products?*


Does anyone want to buy my milk, eggs, meat etc.? Is the price worth the effort? Am I able to compete with other farmers?

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### Making a decision on animal husbandry

*Is my farm suitable?*  
Do I have sufficient:

- Space
- Fodder
- Know-how?



*Can I get the necessary inputs?*

- Labour
- Fodder
- Veterinary support
- Breeds

*Will the animals benefit my farm?*

- Use of dung
- Products for own consumption or sales
- Affecting crops

*Can I find a market for the products?*

- Demand
- Price vs. effort
- Competition

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*Transparency 6.1.1c: Some questions to facilitate the decision on whether to engage in animal husbandry.*

### **Individual farm assessment**

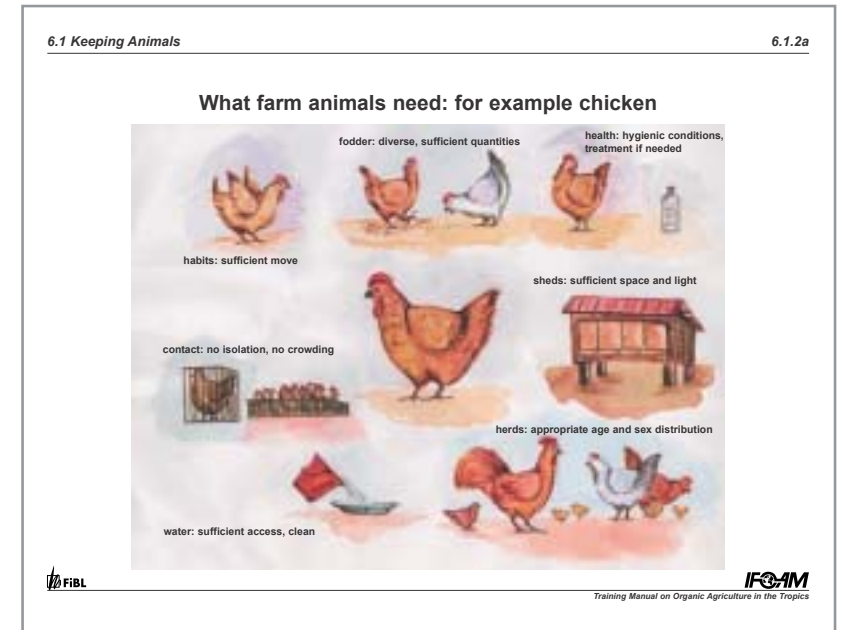
*Participants can use the questions as a checklist on their own farms or on farms they are advising.*

## 6.1.2 The Requirements of Farm Animals

### What animals need

Organic farmers try to achieve healthy farm animals which can produce satisfyingly over a long period of time. To achieve this goal, various needs of farm animals have to be considered:

- Fodder in adequate quality and quantity; for non-ruminants: diversity in fodder is usually required.
- Sufficient access to clean drinking water.
- Clean sheds of sufficient size and with adequate light and fresh air.
- Sufficient freedom to move around and perform their natural behaviour.
- Healthy conditions and veterinary follow up, if needed.
- Sufficient contact with other animals, but no stress due to overcrowding.
- For herd animals: an appropriate age and sex distribution within the herd.



*Transparency 6.1.2a: Chickens, for example, have various needs which should be fulfilled simultaneously.*

### **Discussion: Meeting the needs of farm animals**

*What are the needs of the different kinds of farm animals typically found in the region? Which needs are frequently neglected in conventional farming? How can they be met in organic farming?*

### What the IFOAM Basic Standards say on animal husbandry

Organic animal husbandry means not only feeding organic food and avoiding synthetic food additives, but also putting a focus on satisfying the various needs of the farm animals. Good health and welfare of the animals are among the main objectives. Suffering due to mutilations, permanent tethering or isolation of herd animals must be avoided as much as possible. For various reasons, landless animal husbandry (i.e. fodder purchased from outside the farm, no grazing land) is not permitted in organic farming.

There is a range of standards regulating the management, shedding, feeding, veterinary treatment, breeding, purchase, transport, and slaughter of farm animals in detail. Some of the most important standard requirements are listed in Transparency 6.1.2b.

6.1 Keeping Animals 6.1.2b

### What the IFOAM Basic Standards say on animal husbandry

<p><b>Animal welfare:</b></p> <ul style="list-style-type: none"><li>• Sufficient free movement and chance to express natural behaviour.</li><li>• No cage keeping, no landless animal husbandry.</li><li>• Sufficient access to food, water, air and daylight.</li><li>• No mutilations; suffering must be reduced to the minimum.</li></ul> <p><b>Feeding:</b></p> <ul style="list-style-type: none"><li>• Min. 50 % of the fodder shall come from the organic farm.</li><li>• Max. 15 % of foodstuff can be of conventional origin (ruminants: max. 10 %).</li><li>• No synthetic food additives allowed.</li></ul>	<p><b>Veterinary Medicine:</b></p> <ul style="list-style-type: none"><li>• Preventive measures above therapy!</li><li>• If natural medicines are not effective, conventional medicines are allowed.</li><li>• No use of synthetic growth promoters, hormones, tranquillisers etc.</li></ul> <p><b>Purchase and Breeding:</b></p> <ul style="list-style-type: none"><li>• Preferably purchase of organically raised livestock.</li><li>• No animals from embryo transfer and no GMO.</li></ul>
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*Transparency 6.1.2b: Some important requirements of the IFOAM Basic Standards referring to animal husbandry.*

### **Group work: Studying the standards**

*If animal husbandry is a significant farm activity in the region, participants should become more familiar with the details of the organic standards. To do this, copies of the relevant sections of the IFOAM basic standards, or if available of national organic standards, may be distributed to the participants. The relevant chapters can be discussed in groups and the results presented to the other groups. The template used in chapter 2.3.2 (see Annex 8.1) can help to summarize each standard requirement and to analyse its practical relevance on the farm level. Copied on an overhead transparency sheet, the presentation becomes very easy.*

### How many animals to keep?

In order to identify the appropriate number for a specific kind of animal on a farm, the following points should be considered:

- Availability of fodder on the farm, especially in periods of scarcity (e.g. dry season).
- Carrying capacity of pastures.
- Size of existing or planned sheds.
- Maximum amount of manure the fields can bear.
- Availability of labour for looking after the animals.

In tropical countries, farm animals are frequently found to be underfed. When defining the number of farm animals, keep in mind that the economical benefit will be higher when fewer animals are kept, but fed well. Not only the amount, but also the quality of the available food must be taken into consideration.

### 6.1.3 Sheds

The type of shed should be specific to the type of animals to be sheltered. Poultry, for instance, should be housed in sheds that do not get too hot. Contact of the animals with their faeces should be avoided as much as possible.

#### Planning sheds

With the exception of nomadic lifestyles, most farm animals are temporarily kept in sheds. The combination of animal husbandry and farm activities requires control of their movements so as to avoid damage to crops. For the welfare and health of the animals, sheds must be cool and aerated, and protect from rain. They should be constructed in a way ensuring:

- Sufficient space to lie down, stand up, move and express natural behaviour (e.g. licking, scratching etc.).
- Sufficient light (as a rule, one should be able to read a newspaper in the shed).
- Protection from sunlight, rain, and extreme temperatures.
- Sufficient aeration, but no draught.
- Appropriate beddings (see section below).
- Elements to exercise natural behaviour (e.g. for poultry: perching rails, sand baths and secluded laying nests).
- Sheltered pits or heaps to collect and store manure.

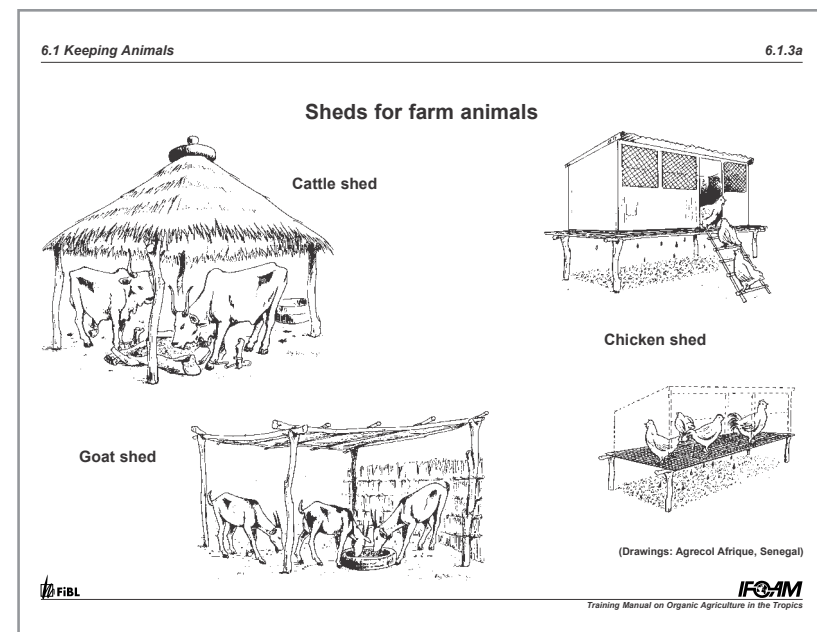
For economic reasons, sheds can be built with simple, locally available materials. Many countries have a rich tradition of shed constructions, and have developed the most efficient and appro-

### Experience sharing: Appropriate stocking rates

Gather the experience of the participants on the board by asking two questions:

- 1.) How many animals do farmers keep in the region?  
→ note the number of different stocking densities (animal per land holding size) in different farming systems
- 2.) What are their reasons for keeping more or less animals?  
→ note the reasons and constraints as suggested by the participants

Conclude the findings, discuss whether there can be a general recommendation for organic farmers on how many animals to keep.



Transparency 6.1.3a: Traditional simple sheds in Senegal: cattle shed, goat shed, chicken shed

priate shed systems for the conditions of the region. If techniques of this heritage are combined with the above principles, a locally adapted and at the same time animal friendly system may be obtained.

### **Beddings**

Beddings are materials used in sheds for keeping the floor soft, dry, and clean, which is important for animal health. They absorb the excrements of the animals and need to be replaced from time to time. Beddings can be of straw, leaves, twigs, husks or other locally available material. They can be replaced daily or kept for several months while adding fresh material on top.

### **Group Work: Shedding**

Select the most important farm animals in the area and form 2 – 4 groups of participants, each group assigned to one animal. Each group shall discuss the following questions and present their results to the plenum:

- Which shed systems are found in the region for the respective animal? (sketches)
- Are the animals allowed to move around? to graze? how?
- Which beddings are used and how are they managed?
- Where are the possible conflicts with organic standards?
- What are possible improvements of the shed systems with regard to organic principles?

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### **Recommended Readings**

- «Diary Cattle Farming», Agromisa Agrodok-series No.14.
- «Integrated Farm Management», World Neighbours Practical Guide to Dryland Farming No. III.