



## Backyard grasscutter keeping



Agromisa's mission is to strengthen the self-reliance and food security of small-scale farmers in developing countries worldwide, but with a focus on Africa. Agromisa dedicates itself to sharing experience and exchanging knowledge in the field of small-scale sustainable agriculture and related topics.

It is Agromisa's belief that the gap between formal (scientific) knowledge and informal (farmers') knowledge should be bridged. To achieve this, Agromisa makes existing information accessible for farmers and their intermediary organisations, using a network of experts that have considerable field experience.

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# Foreword

This Agrodok is the outcome of cooperation with authors of earlier grasscutter publications in various African countries.

Agromisa believes in the potential of backyard grasscutter rearing. Producing high-quality grasscutter meat for household use and/or for the market is easily integrated into low-input ecological agriculture. Moreover, keeping grasscutters can be profitable: after the initial investments in stable(s) and stock, care and maintenance are relatively easy and feed can be cheap; and grasscutter meat sells at good prices.

This Agrodok explains the details and hazards of grasscutter farming. Within Agromisa's overall aim of improving small-scale farming, this booklet offers an approach to make grasscutter farming a successful and rewarding enterprise.

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# Contents

<b>1 Introduction</b>	<b>7</b>
1.1 The scope and focus of this guide	7
1.2 Structure of the Agrodok	8
1.3 Advantages and disadvantages of grasscutter farming	9
<b>2 Biology and distribution</b>	<b>13</b>
2.1 General characteristics	14
2.2 Reproduction	14
<b>3 Selection, handling and domestication</b>	<b>17</b>
3.1 Selection criteria	17
3.2 Handling and transporting animals	19
<b>4 Housing: the stable with cages</b>	<b>25</b>
4.1 The stable	25
4.2 Cage types and dimensions	30
4.3 Cage construction	32
4.4 Equipment and accessories	35
<b>5 Reproduction and growth</b>	<b>37</b>
5.1 Sexual maturity and mating	37
5.2 Pregnancy diagnosis and gestation period	38
5.3 The litter	40
<b>6 Nutrition and feeding</b>	<b>43</b>
6.1 Water	44
6.2 Forage	45
6.3 Other feed	48
6.4 Feed quantities	51
6.5 Feeding schedule; the grasscutters' daily rhythm	51
6.6 Weight gain and feeding profitability	52

<b>7 Health</b>	<b>53</b>
7.1 Prevention	53
7.2 Ailments, symptoms, treatments and preventive measures	55
7.3 First aid box	60
<b>8 Administration</b>	<b>63</b>
8.1 Financial administration	63
8.2 Stock administration	64
8.3 Farm administration	65
8.4 Record-keeping for selection	70
8.5 Use and examples of records	71
<b>9 Slaughtering and processing</b>	<b>73</b>
9.1 Slaughtering and dressing	73
9.2 Nutrient value of grasscutter meat	75
<b>10 Marketing</b>	<b>77</b>
10.1 Place, product, promotion and price	77
10.2 Getting organised	79
<b>11 Profitability of grasscutter farming</b>	<b>83</b>
11.1 Profitability data in various reports	83
11.2 Case study - profitability of grasscutter production in Ghana	86
Appendix 1 Growing elephant grass for grasscutter fodder	89
Appendix 2 Preparation of concentrates for grasscutters	93
Further reading	95
Useful addresses	97
Glossary	99



# 1 Introduction

Domestication of the grasscutter (also known as cane rat) is slowly becoming a success story in sub-Saharan western and central Africa, where grasscutter farming has proven to be a profitable business.

Because of its tasty meat – appreciated by all, regardless of ethnic origin or religion – grasscutters have been hunted locally to the point of extinction. For that reason, farmers have become interested in raising them in their backyards.

Developing techniques for domestication and rearing of some of the heavily hunted wild animal species is a sensible way to produce protein-rich food for increasing human populations.

After initial problems, grasscutter farming has now become well established, leading to a spate of booklets and guides on the subject. Some of these sources give the impression that it is an easy way to ‘get rich quickly’. Grasscutter farming can be quite profitable, but it demands good preparation, care and commitment.

## **1.1 The scope and focus of this guide**

This Agrodok provides up-to-date information on grasscutter farming to benefit the informed farmer and extension and rural development officers.

It targets farmers wishing to diversify their farms as well as their families' diet, and those considering growing grasscutters for the market.

The name *grasscutter* is preferable to *cane rat*, which refers to the animal's reputation as a marauder of planted crops (sugar cane!). Its popular name grasscutter (or cutting-grass) better befits a species on its way to domestication.

## **1.2 Structure of the Agrodok**

Chapter 2 briefly describes the two grasscutter species in Africa, their original geographical distribution, natural behaviour, feeding and reproduction. Chapter 3 discusses criteria for animal selection when starting grasscutter farming, natural behaviour and rules on their treatment in captivity, sex determination, domestication and handling.

Chapter 4 deals with the basic criteria for good grasscutter housing. It describes shed(s)/stable(s) and the different types and arrangements of cages within each housing unit. Possible building materials are listed and advantages/disadvantages of different designs and materials are discussed. Necessary accessories for stable and cage (for storing, cleaning, eating, drinking, gnawing) are described.

Chapter 5 deals with grasscutter reproduction: breeding groups, heat and copulation, pregnancy and parturition, suckling and weaning, and mating interval.

Chapter 6 discusses grasscutter feeding (forage, other feed, concentrates and water) and feeding habits. Daily feeding and management routines are discussed. Methods are presented for keeping an overview of grasscutter breeding and growth performance.

Chapter 7 deals with health and health care, covering topics such as disease prevention, wounds and their treatment, ailments and diseases (e.g. dental problems, intestinal infections and worms, respiratory problems, external parasites), first aid essentials, medicines and equipment.

Chapter 8 discusses administration. The two essential types of grasscutter farm administration are explained: business/financial administration and stock records. Methods to identify individual sheds/stables, cages/hutches and animals are described. Examples of record sheets are given.

Chapter 9 briefly describes grasscutter slaughtering and dressing, and meat-preserving options.

Chapter 10 discusses marketing and trade, the local market, restaurants and hotels, and grasscutter farmer cooperatives for supplying to regional and, possibly, international markets.

Chapter 11 gives indications of the profitability of grasscutter farming. An annex on concentrates, feed and feeding values, a list of useful addresses, suggestions for further reading, and a glossary conclude this Agrodok.

*Note: this Agrodok uses the metric system of weights and measurements throughout; temperatures are expressed in degrees Centigrade.*

### **1.3 Advantages and disadvantages of grasscutter farming**

#### **Advantages**

- There is a good market for the animal's tasty meat. As a type of bush-meat, it is highly valued as well as pricey. It therefore offers a good source of income that requires relatively modest efforts.
- Farmers may profit from the experience of and research results on grasscutter rearing from well-established grasscutter farming ventures in Cameroon, Gabon, Ghana, Nigeria and Benin.
- Grasscutters are naturally clean animals; they urinate little and their enclosure is not smelly, so they can be kept near the house in a quiet place.
- Feeding costs can be low, since grasscutters mostly eat forage that possibly can be harvested in the wild.

#### **Disadvantages**

- *Docility.* Grasscutters are not (yet) established farm animals, though docility seems to be a heritable trait that might be improved through selective breeding. This may also be true for a number of the following characteristics.
- *Relative low productivity.* Average effective litter size is 3-4; they have a long gestation period and hence on average fewer than two litters per year.

- *Stress prone*: Stress-related injuries are a major cause of death. A frightened animal may panic and jump from one corner to the other, often injuring itself. Stress can be caused by noise and wind, to which grasscutters are very sensitive. In suburban zones, the difficulty of finding a quiet site for the grasscutter pen might be a limiting factor.
- *Choosy feeders*. They do not eat soft, powdery food and reject forage after lying or urinating on it.
- *Sensitive internal organs*. The animal may die if held with force around the abdomen; this requires the use of a catch or restrictor.
- *High initial investment*. Grasscutter farming demands a considerable initial investment, particularly for the animals' housing (see Chapter 4).
- *Expensive breeding stock*. The initial breeding stock (1 male + 4-5 females to start a breeding unit) must be bought from other farmers, breeders or poachers, and they are not cheap.
- *Slow returns on investment*. Initial returns, in the form of youngsters ready for eating or sale, will not accrue until after about one year.
- *Feeding*. Many guides advocate using the cheap 'feed (grasses) from the wild', more specifically cutting (elephant) grass from empty lots and/or roadsides. Apart from the risk that this grass may be contaminated with dung, garbage or litter, the 'would-be grasscutter farmer' is competing here with fellow farmers who use the same feed source for their cattle, goats, rabbits, etc. A farmer should consider where and how to get feed for his animals before embarking on grasscutter farming.
- *Price competition*. Grasscutter bush-meat is still (readily) available in some rural areas. Its selling price sets a maximum on the price of farm-reared grasscutters grown for the market, limiting the feasibility of grasscutter farming in rural areas.

**A farmer should thoroughly consider his/her motives, objectives, resources and financial situation before starting to raise grasscutters.**