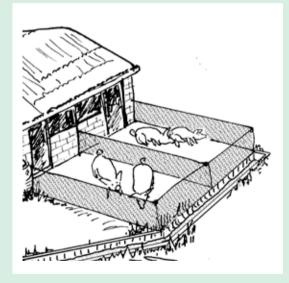


# Pig farming in the tropics

From free range to small-scale intensive production systems









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# Agrodok 1

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From free range to small-scale intensive production systems

Johan van 't Klooster Arie Wingelaar This publication is sponsored by: ICCO

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## **Foreword**

Research and development organisations are currently showing increasing interest in smallholder pig keeping. The rationale underlying this is the hope that pigs may offer a way of improving the well-being of many small-scale farmers. Smallholders, however, have never lost interest in their pigs, and these animals remain a highly appreciated secondary activity on mixed farms worldwide. I am therefore very happy that Agromisa and CTA have updated and revised this popular Agrodok 'Pig Keeping in the Tropics'.

Good pig farming relies on a combination of inter-connected aspects, such as housing, breeding and reproduction, nutrition, disease prevention and control, and management. This practical booklet focuses on all these subjects and links them to the three main smallholder pig production systems: free-range scavenging, semi-intensive, and small-scale intensive pig keeping.

This Agrodok aims to provide information for farmers and those who advise farmers involved in pig keeping. I trust that it will be of practical value to everybody who cares for pigs.

Henk Udo, Animal Production Systems, Wageningen University

#### Acknowledgements

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The Agromisa team

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# 1 Introduction

Pigs are kept in one form or another almost everywhere in the world. In rural areas of many parts of the world, it is still common to find pigs rooting and roaming freely around communities, which are sold or slaughtered when household needs require. Pig-keeping enterprises are also found in and around towns and cities, and they play an important role in feeding urban populations.

This Agrodok describes three typical pig-keeping systems:

## Free-range scavenging pig keeping

A more or less extensive system that provides a household emergency fall-back fund, whilst also supplying it with a little meat from time to time, with little investment of time or money. This domestic scale is typical of small farmer mixed holdings.

#### Semi-intensive pig keeping

In this system the animals are housed and more attention is paid to their health and feeding. The aims are partly the same as those of domestic pig keeping, but with modest inputs. Production is higher and the pigs are also marketed.

### ▶ Intensive pig keeping

This system aims at producing meat for the market efficiently and profitably, usually with larger numbers of pigs. It requires significant inputs of time and money, with careful calculation of the costs and the resulting benefits.

We consider the main characteristics of each of these systems, the purposes they serve, and the methods employed, as well as noting their limits and ways of improving them. There are of course many systems of pig keeping. The three models we describe give an idea of the options available and ways to make the transition from extensive to intensive management, noting the points that need special attention.

This book is intended for those who advise farmers involved in pig keeping. It will also be of use to farmers themselves who want to set up or make changes to an existing system. Anyone who is considering keeping pigs, or improving an existing system, needs first to be clear about the existing situation, the resources available and the constraints faced, in order to decide which type of system is most appropriate to introduce.

It is very important that farmers who are new to pig keeping build up their enterprise gradually. They would be best advised to start with a semi-intensive approach, concentrating on establishing good housing and proper feeding routines for a small group of healthy animals, taking proper advantage of all locally available resources.

### **Agrodok summary**

The three systems of pig keeping are presented in Chapter 2. Chapter 3 looks at housing: why this is such an important element in the system, and what makes for good pig housing. It outlines the various parts of a piggery and deals with the installations required for feeding and farrowing. It also considers the housing requirements of the sow and her piglets, and of the fatteners. Chapter 4 addresses the management of sows and boar(s), birth of piglets and potential problems, care of piglets (including teeth-trimming and castration). The signs of oestrus and fertility disorders are also dealt with. Chapter 5 covers nutritional requirements and practical aspects of feeding the different categories of pigs. Chapter 6 describes the main diseases that affect pigs, the symptoms and treatments. Preventive measures are described in detail, and general remarks on the use of medicines are made. Chapter 7 covers the important question of keeping management records and basic financial management.