A Survey of Pig Production Systems in the Rain Forest of the Pacific Coast of Colombia

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ABSTRACT

A questionnaire-based survey was conducted in small-scale pig farms in the rain forest of the Colombian Pacific coast in order to study aspects of reproduction, nutrition and productivity. A total of 124 farmers was interviewed. They owned, on average, 13.6 pigs, including 2.3 sows, mainly of the Zungo breed. Pigs are reared in extensive systems and are allowed to wander freely in search of food. The sows produce, on average, 9.6 piglets/litter but, owing to poor sanitary conditions, 1.5 are born dead and only 6.3 are weaned alive. Two-thirds of the sows have five litters or more and the boars are also kept for a long time. This leads to high consanguinity rates within the herd and low productivity. Diets are based on maize, banana, tubers (taro, cassava) and fruits (peach palm, among others), and are rich in energy but poor in protein and minerals. The lack of protein and mineral sources appears to be the main limiting factor of these extensive production systems. Tree forages could partially solve the problem but are used by only 2% of the farmers. It is concluded that decreasing inbreeding, better piglet management and provision of balanced diets are areas that require immediate improvement.

Keywords: Colombia, nutrition, pig, production system, productivity, rain forest

Abbreviations: DM, dry matter; NDF, neutral detergent fibre; SD, standard deviation

INTRODUCTION

The rain forest of the Colombian Pacific coast is considered as one of the 25 ‘biodiversity hotspots’ of the world. This ecoregion covers 74,000 km² and receives 4,000–12,000 mm of rainfall per year. It is culturally rich in that numerous indigenous communities with strong ties to its ecosystems are still present. Two main categories can be distinguished: a community of black people and a community of native Indians. The Bauido is one of the few rivers in Colombia that empties into the Pacific ocean. Its basin is inhabited by a community of black people. They live along the river and its tributaries and grow crops such as maize, banana and peach palm (Bactris gasipaes). The latter is the main source of cash. They also extensively exploit the rain forest for timber, hunting and fruit picking.
Pig production is perceived as an opportunity to improve income. Pigs are part of the community’s traditions and are generally sold or bought in specific circumstances (celebrations, etc.) or when cash is needed. However, few farmers take care of their animals and most are left to scavenge freely and are fed only when feeds are available. ACABA, the association of the black community living in the Baúdo region, wants to improve the well-being of the people by improving the agricultural systems, as long as the latter are respectful of the environment. They also consider it necessary to keep people in the region and to impede the development of illicit crops, such as the coca tree. As a first step towards achieving this, they asked for a survey to see whether there is any interest in improving pig production systems and whether the latter could be sustainable.

The objective of the present study was to obtain baseline information on specific aspects of production and nutrition systems used in small-scale pig farms. The survey was expected to identify the major constraints faced by the pig producers and strategies for possible improvement.

MATERIALS AND METHODS

Location

The Baúdo basin is located between latitude 4° to 5°15’ N and longitude 79° to 76°15’ W and has an area of more than 5000 km². It drains a region dominated by the Serranía of Baúdo, which culminates at 1800 m above sea level, but the Baúdo itself is at an altitude lower than 100 m. It has a very complex hydrography, with more than 25 tributaries. The average precipitation of the region is 6500 mm per year and the average temperature is 28°C (IGAC, 2000).

Organization of the survey

Most of the survey was carried out in the upper part of the basin (Alto Baúdo). A total of 325 pig producers, belonging to 46 different villages, were identified by the leaders of the ACABA association. Among these producers, 124 were considered as representative of each village (not necessarily the main producer) and reliable sources of information.

Five interviewers, chosen by ACABA, were trained. They were members of the black community of the Baúdo river and were chosen for various reasons: people trust them, they can translate some words used only in the region, and their presence does not attract the attention of the guerrillas. Later, the questionnaire was tested in a village by the interviewers. The results of the training session are not considered in the present study. Special attention was paid to the estimation of pig weight. The surveyors were trained to use hanging balances (50 and 100 kg). During the survey, they weighed pigs of different weights, in order to give a reference to the farmers, so that the latter could estimate the weight of all the pigs more accurately.