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# Sustainable animal production in the humid regions of Guinea Bissau: Major characteristics and possibilities for improvement

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## Introduction

Guinea Bissau is one of the least developed countries in the world. This small country in West Africa has a characteristic tropical climate with two distinct seasons (wet and dry) that significantly effect agriculture and animal production. The country can be divided in two distinct regions: humid coastal areas (higher rainfall) and sahelian type savannas in the interior. In this work we characterize the animal production systems in two humid coastal regions of Guinea Bissau: *North Cacheu* and *Tombali* regions (NW and SW of the country, respectively). Such characterization allowed us to pinpoint major constraints to the development of the animal production systems and suggest key strategies towards its sustainable development.

## Characterization of the animal production systems in humid Guinea Bissau

Two surveys of the animal production systems and genetic resources were conducted in two regions of Guinea Bissau: Northern Cacheu (Almeida and Cardoso, 2008a) and Tombali (Almeida and Cardoso, 2008b). Animal owners and their families, village chiefs, shepherds and local officials were interviewed. In both regions, the vast majority of the population is dedicated to very small-scale subsistence farming where animal ownership has an important role in both food supply, ceremonial events and as a form of cash reserve. Cattle (N'Dama and West African Shorthorn breeds) are owned by the two larger ethnic groups in these areas: the Balanta (both areas), and the Felupe (N Cacheu) and the Nalú (Tombali) but they have different management practices. Sheep are relatively scarce whereas goats (West African Dwarf) are the most important small ruminant species for all ethnic groups. Pigs (crioulo breed) and dwarf chickens play a very important role as they are the only species regularly used in trade at village level. In both regions no animal selection measures are implemented and no standard veterinary management is practiced due to lack of infrastructure and human resources of the Ministry of Agriculture services. Trade in animal products is extremely new as no regular is established either within region or with other regions of Guinea Bissau or with neighbouring Republics of Guinea or Senegal.

## Possibilities for improvement towards sustainable animal production systems

Live animal derived products are very importance in the humid coastal regions of guinea Bissau. They make an important contribute to the populations' diet and are equally important for specific rituals, cash emergency reserve and emotional reasons. Animal production could be optimized using local genetic resources, which despite having low production levels, are well adapted to difficult local conditions namely diseases and parasites. Improvements in animal productivity could be achieved in four areas: 1) improvement of animal management, through standard selection and breeding procedures and access to water and other feed sources; 2) minimizing contact between domestic and wild animals which are potential reservoirs of fatal or damaging diseases; 3) the establishment of simple prophylactic measurements such as de-worming or vaccination against the most important diseases; 4) enhancing livestock trading activity so as to allow animal products to play a more relevant role in local economy. Such tasks could be undertaken by the Central Government with special relevance to the Ministry of Agriculture although lack of funding and skilled technicians is a problem. Alternatively it could be undertaken by community groups in collaboration with international organizations, either governmental or NGOs.

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