Performances and Efficiency of (Peri-)Urban Pig Breeds under Different Production Management in Ouagadougou, Burkina-Faso

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Abstract

The demand of pork in sub-Saharan Africa is supposed to rise substantially in the coming years due to urbanisation and urban population growth. In this study we compared the production performance and resource use efficiency of local and crossbred pigs under different feeding intensities in six representative (peri-)urban pig farms in Ouagadougou, Burkina Faso, by quantifying input and output every 6–10 weeks over a 16-month period. The overall productivity of pig rearing was low, with mortality rates of 61% and 14% in local and crossbred pigs, respectively, and average litter sizes of 5.1±1.9 versus 5.4±2.3 piglets in crossbred and local sows. The inter-farrowing interval averaged 206±42 days in both breeds. The average daily weigh gain (ADG) of growing animals was 110±116 and 70±69 g d⁻¹ in crossbred and local pigs, respectively. Suckling crossbred pigs had a 60% higher ADG than local pigs while their mother sows were losing weight about twice as fast during lactation than the local sows, even though they received about 40% more feed dry matter per kg metabolic weight and day. Most feeds offered to pigs were protein-rich industrial by-products, and supply of commercial pig feeds was limited to crossbred pigs. There was a high variability in feeding intensities between farms and seasons. In most cases, the provision of metabolisable energy was by far more limiting pig growth than the supply of digestible protein, with severe energy deficits observed in 50% and 40% of local and crossbred animals, respectively. A more efficient use of resources and therefore an improvement of production performances can be realised through requirement-based pig feeding, combined with improved animal management that includes the cancelation of scavenging, adoption of proper housing and year-round stall feeding.

Keywords: Feeding intensity, Ouagadougou, pig breeds, production performance, resource use efficiency, West Africa

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