

# The use of poultry and swine in smallholder farms in Colombia & Nicaragua: A value chain analysis



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## Introduction

Poultry and swine production in smallholder farms is based on the backyard production system (flexible but low productivity; low livestock numbers of <30 chicken and <3 swine). The markets for swine products are mostly local with little integration at national scale (niche market; low health and food safety standards) and the markets for poultry products are mostly industrial with integration at national scale (high health and food safety standards).

## Objectives & Methods

- Objectives: To identify the role of poultry and swine for smallholder farmers in terms of family income and food security. To analyze feeding strategies, resource allocation and market alternatives within the value chain.
- Research areas: Timbio/Parraga (Cauca, Colombia; 11/2009); Chinandega/El Sauce (North Pacific, Nicaragua; 09/2009).
- Data collection: 3 different surveys (for producers, middlemen, retailers) including qualitative & quantitative questions. Secondary information from the National Ministries of Agriculture and the Inter-American Institute for Agricultural Cooperation (IICA, Nicaragua). Altogether 17 producers and 9 retailers were interviewed.

## Results

	Colombia	Nicaragua
Average chicken stock/farm	21.6	31.1
Average swine stock/farm	25.33	2.45
Use of contract workers	none	0.56 days/week
Major feeds used	Maize (mostly on-farm grown) Concentrate Cassava starch Farm waste	Maize (mostly on-farm grown) Concentrate Whey Farm waste
Contribution of diet to protein and energy needs (%)	Energy growing chicken: 97% Protein growing chicken: 57% Energy swine: 86% Protein swine: 55%	Energy growing chicken: 69% Protein growing chicken: 33% Energy swine: 79% Protein swine: 55%
	<ul style="list-style-type: none"> <li>• Diet deficiency in energy and protein</li> <li>• Most limiting factor is protein</li> </ul>	
Major problems perceived	Access to credit High price for feed concentrate	Access to credit High price for feed concentrate
Slaughtering & Marketing of swine	Average pig sales price/kg live weight: 2.24 US\$	Average pig sales price/kg live weight: 1.28 US\$
	<ul style="list-style-type: none"> <li>• Pigs are on-farm sold to local butchers and marketed directly through them and local restaurants</li> <li>• Slaughtering takes place in farm backyards</li> <li>• No health and food safety standards</li> </ul>	



## Conclusions

- Smallholder swine production is an alternative rural families have to obtain additional income using existing on-farm resources (e.g. family, labor, household waste, maize grown on-farm).
- Smallholder poultry production is an important source of animal protein for the rural family's nutritional well-being.
- Promoting improved legumes to reduce the diet deficiency can be helpful to increase both the swine production for additional income and the poultry production for increased family nutrition.
- Improved legumes can help to reduce the purchase of expensive feed concentrates.
- Microcredit is important for extending the swine production but the supply currently does not match the demand which limits smallholders in production.
- The health and food safety standards for the swine sector have to be improved to facilitate a higher consumption and the growth of the sector.