

Rural poultry survey unlocks options for intensification in northern Ghana

Introduction

Intensive or semi-intensive rearing of improved and unimproved stocks of chickens, guinea fowls, ducks, turkeys and pigeons in relatively small numbers for food (meat, eggs) and cash has potential to reduce poverty, malnutrition and food insecurity among rural and peri-urban farm families. However, little is known about rural poultry production systems in the Africa RISING intervention communities in Ghana. IITA, University for Development Studies and Kwame Nkrumah University of Science and Technology are working with farmers to raise and sustain productivity of the rural poultry production systems in the Africa RISING project intervention communities.

Methods

Questionnaire and interviews were used to collect data on rural poultry production from 180 households randomly selected from two districts in each of the three regions – Northern, Upper West and Upper East. The questionnaire covered demographic and poultry production characteristics.

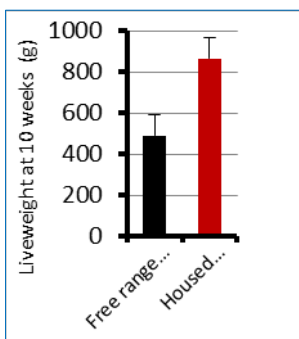


Figure 1: Housing affects weight of chickens

Results summary

Production is mainly semi-intensive (Table 3). Men are the predominant keepers (85%). Most of the keepers were illiterate. Guinea fowls and chickens were types kept for income and home consumption (Table 1).

Most households provided housing for their birds, which accommodated both young and adult birds as well as different types. Birds mainly scavenge for food on the rangeland, but are supplemented with cereal grains.

The grains were obtained largely from farmers' farms. Watering was done daily using locally made pots placed outside the coops. Disease incidence was high, and veterinary care was inadequate. Diseases and predation were major constraints (Table 3). Breeding stocks were obtained mainly from the market as well as from friends and relatives. Mating was not controlled. Preliminary on-farm studies showed improved housing (Photo 3) improves live-weight of birds (Fig. 1).

Conclusions

Extension of improved technologies and training of farmers on best management practices could improve rural poultry production. For example, production can be improved through establishment of breeding stock and hatchery and brooding facility for regular and reliable supply of either hatching eggs or chick/keets to farmers in order to shift to sustainable small-scale commercial production.



Photo 1: Rural poultry housing



Photo 2: Semi-intensive poultry system



Photo 3: Intensive poultry production units

Species	UER	UWR	NR
Guinea fowls	100	76.3	64.3
Chickens	100	96.6	91.4
Turkeys	0	6.8	0
Ducks	19.6	15.3	4.3

UER=Upper East, UW=Upper West, NR=Northern

Constraint	UER	UWR	NR
Pests and diseases	100	91.5	85.7
High keet mortality	78.4	69.5	68.6
Predation	82.4	69.5	61.4
Lack of knowledge	60.8	62.7	30
Feed shortage	56.9	62.7	25.7

UER=Upper East, UW=Upper West, NR=Northern

Systems		
Systems	Semi-intensive	97.3
	Free Range	2.7
Housing	Mud	87.4
	Wooden	8.4
	Others	3.1
Feeding	Grains + scavenging	93.6
	Feed + scavenging	4.8
	Scavenging only	1.6
Breeding	Uncontrolled mating	100
	Brooding by hen	100



The Africa Research In Sustainable Intensification for the Next Generation (Africa RISING) program comprises three research-for-development projects supported by the United States Agency for International Development as part of the U.S. government's Feed the Future initiative.

Through action research and development partnerships, Africa RISING will create opportunities for smallholder farm households to move out of hunger and poverty through sustainably intensified farming systems that improve food, nutrition, and income security, particularly for women and children, and conserve or enhance the natural resource base.

The three projects are led by the International Institute of Tropical Agriculture (in West Africa and East and Southern Africa) and the International Livestock Research Institute (in the Ethiopian Highlands). The International Food Policy Research Institute leads an associated project on monitoring, evaluation and impact assessment.

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