UMAR I.M1 AND HASSAN, W. AKIN2

¹School of Engineering, Federal Polytechnic, Kaura Namoda, Zamfara State ²Department of Animal Science, Usmanu Danfodiyo University, Sokoto State E-mail: ibrahimumar164@gmail.com

Abstract

Twenty-nine (29) copies of an open ended questionnaire were administered at Gangaren Dange and Dogon Karfe from October to December 2010 to determine the sources of indigenous poultry and eggs and various distributions from flocks to consumers. Items covered in the questionnaire included: the respondent's particulars, species of poultry and eggs supply, and motivation, challenges and prospects. The two locations were under Dange Local Government and Bodinga Local Government, respectively. Information obtained was analyzed using descriptive statistics. Results obtained showed that about 60% of the hawkers had an experience of about 20 years in the business; the average capital outlay was about #18,000; most of them generated less than #2,000 per week. Almost all the respondents hawked both domestic fowl and guinea fowl; barely three-quarters sourced their fowls and eggs through rural collectors in about a dozen villages.

Keywords: Smallholder poultry, sources, distribution, motivation and prospects.

Introduction

Poultry includes chickens, ducks, geese, guinea fowl, peacock, pigeons, swans and turkeys. Each of these domesticated groups is descended from a closely related wild bird and was probably first developed in the areas where the wild bird is indigenous. World numbers are estimated at more than 15 million chickens, about 1 million ducks, 245 million geese, and some 250 million turkeys. Chickens are numerous in most regions of the world. In the developed countries, production units for meat and eggs are large and intensive, with individual birds housed singly in cages or housed together in large numbers. Under these conditions, one operator can care for large numbers of birds with high labor efficiency and good control of

disease and the environmental factors affecting production (Encarta, 2009). Poultry are widely acknowledged as the livestock of the poor, and poultry production is part of most smallholder farming systems. Guèye (2000) writes that 85 percent of rural house-holds in sub-Saharan Africa keep chickens or other types of poultry. Poultry are equally important to smallholders in Asia (FAO, 2003a; Islam and Jabbar, 2005) and Latin America (Mallia, 1999; Kyvsgaard, 2007).

The bulk of poultry in Nigeria is maintained under low input extensive system of management. Worldwide, there is renewed interest in the traditional systems of poultry production (Panda and Mohapatra, 1998). It is worth nothing that significant losses of village poultry are due to predation and theft, as most of the households do not provide housing for their birds. A study in Niger Delta showed that family poultry husbandry contributes 35% of the income of household women, and it is estimated at about 25% and 50% of Nigerian minimum wage and per capita income, respectively (Alabi et al., 2006). Furthermore, experiences in Bangladesh and other countries have shown that village poultry can be used as a tool for poverty alleviation (Jensen and Dolberg, 2002). Therefore, all over the developing world, these low-input, low-output poultry-husbandry systems are an integral component of the livelihoods of most of rural and some urban, households, and are likely to continue to meet this role for the foreseeable future.

Materials and Method Sampling Site

The survey was conducted at two locations along two major roads of Sokoto State; Gangaren Dange (along Sokoto-Gusau road) and Dogon Karfe (along Sokoto-Jega road).

Collection and Processing of Samples

The data collection involved administration of a checklist on fowls and eggs sourcing and hawking through personal interview with hawkers. Emphasis was put on the supply of the birds and the different channels through which they were obtained by the hawkers with a view to getting to the village flocks, which serve as repositories for the hawked poultry products. The data collected were analyzed using descriptive statistics (mean, standard deviation, proportion and range).

Results and Discussion

The results obtained from the survey showed that 62% of the poultry sellers had an experience of about 20 years in the business while the others (38%) had an experience of about 10 years. Therefore, most of the respondents had been in the business for quite a while. This tallies with the fact that most of the hawkers were 36 years and above in age (Table 4.1)

Table 4.1: Distribution of poultry hawkers according to age and length of experience

| Characteristic | Frequency | Proportion (%) |
|---------------------------|-----------|----------------|
| Length of experience (yes | ar) | |
| 5 - 10 | 7 | 24.14 |
| 11 - 15 | 9 | 31.03 |
| 16 - 20 | 12 | 41.38 |
| 21 - 25 | 1 | 3.45 |
| Total | 29 | 100 |
| Age of respondents (year |) | |
| 25 -30 | 7 | 24.14 |
| 31 - 35 | 3 | 10.34 |
| 36 - 40 | 12 | 41.38 |
| 41 - 45 | 4 | 13.79 |
| 46 - 50 | 3 | 10.34 |
| Total | 29 | 100 |
| | | |

Most of the hawkers (72%) had an average capital of #18,034.48 (Table 4.2), which could be a factor that makes it easy for the rural people to enter into the business. However, there appears to be a remarkable similarity in the role of poultry in (rural) farming systems across regions, agro ecological zones and cultures (e.g. Aini, 1990; Guèye, 2000; FAO, 1998). The characteristics of village poultry are shared by many countries and cultures. Most rural communities keep poultry. Village poultry is kept with minimal input of resources and is considered by most smallholders as supplementary to the main livelihood activities.

Table 4.2: distribution of hawkers according to capital base

| Capital base (#) | Frequency | Proportion (%) |
|------------------|-----------|----------------|
| 5,000 - 14,000 | 6 | 20.69 |
| 15,000 - 24,000 | 21 | 72.41 |
| 25,000 - 34,000 | 1 | 3.45 |
| Above 34,000 | 1 | 3.45 |
| Total | 29 | 100 |

The poultry hawkers generated a low income which tallies with their complaint of 'no market'. Most of them generated less than #2000 per week (Table 4.3). Some of them might even spend up to two days without selling a single bird or egg. Table 4.3 shows that the weekly income averaged $\#1,469 \pm 765$

Table 4.3: Distribution of Poultry Hawkers According to Weekly Income

| Weekly income (#) | Frequency | Proportion (%) |
|-------------------|-----------|----------------|
| 1000 - 1999 | 14 | 48.28 |
| 2000 - 2999 | 10 | 34.48 |
| 3000 - 3999 | 1 | 3.45 |
| No response | 4 | 13.79 |
| Total | 29 | 100 |

Most of the respondents about (97%) sold both domestic fowl and guinea fowl. Only 3% sold only guinea fowl (Table 4.4). None sold only domestic fowl.

Table 4.4: Distribution of hawkers according to species of poultry sold.

| Species | Frequency | Proportion (%) |
|-------------------------------|-----------|----------------|
| Guinea fowl | 1 | 3.45 |
| Domestic fowl and Guinea fowl | 28 | 96.55 |
| Total | 29 | 100 |

Table 4.5: Means and standard deviations for capital base, estimated weekly income and number of Collectors Parameter

| Mean | Standard deviation | Standard deviation | |
|-------------------|--------------------|--------------------|--|
| Capital base (#) | 18,034.48 | 7566.29 | |
| Weekly income (#) | 1,468.96 | 765.36 | |
| No. of collectors | 1.44 | 1.45 | |

Most of the poultry hawkers (about 76%) sourced their products (fowls and eggs) through rural collectors while the remaining 24% went to the neighboring villages for the materials. These villages include Wababi, Gi'eri and Illela bisallam in Dange Local Government, and Dandun Mahe (Shagari Local Government), Dogon Daji and Jabo (Tambuwal Local Government), Jabe, Kabawa and Dabaga (Yabo Local Government) and Lozobi and Arewa (Bodinga Local Government).

Table 4.6: Distribution of poultry hawkers according to source of products

| Source | Frequency | Proportion (%) | |
|------------------|-----------|----------------|--|
| Rural collectors | 22 | 75.86 | |
| Self | 7 | 24.14 | |
| Total | 29 | 100 | |

The study revealed that the majority of the poultry hawkers (about 52%) had not more than three collectors, the reason that they did not want to go for unhealthy birds from unknown rural collectors. Another reason they gave was that the business involves a smallholder farming system. This agrees with a research conducted by (Kryger et al., 2005) where the term "Smallholder farming system" refers to the many diverse forms of production found in smallholder societies across the world (Netting, 1993). Usually, the "smallholder farming system" is conceived in terms of what is not: not capitalist, not large scale and not technologically intensive. Twenty-four percent had no collectors (Table 4.8)

Table 4.7: Distribution of hawkers according to number of collectors

| No of Collectors | Frequency | Proportion (%) | |
|------------------|-----------|----------------|--|
| 1 - 3 | 15 | 51.72 | |
| Many | 7 | 24.14 | |
| None | 7 | 24.14 | |
| Total | 29 | 100 | |

Most of the respondents (72%) received up to three supplies per week while 3% of them received up to six supplies per week (Table 4.8). This was as a result of cost of maintenance. The remaining 24% did not buy from the collectors.

Table 4.8: Distribution of hawkers according to regularity of supply

| No. of supplies per week | Frequency | Proportion (%) |
|--------------------------|-----------|----------------|
| 1 - 3 | 21 | 72.41 |
| 4 - 6 | 1 | 3.45 |
| None | 7 | 24.14 |
| Total | 29 | 100 |

From table 4.9, the majority (38%) of the hawkers perceived that the supply of the birds and eggs was increasing. They gave the low capital base required to raise the birds as possible reason. About 28% said that the supply was decreasing to low production, while about 14% of them did not notice any change in supply.

Table 4.9: Distribution of hawkers according to the trend in the supply of poultry products

| Trend of Supply | Frequency | Proportion (%) |
|-----------------|-----------|----------------|
| Increasing | 11 | 37.98 |
| Decreasing | 8 | 27.59 |
| Fluctuating | 6 | 20.69 |
| Normal | 4 | 13.79 |
| Total | 29 | 100 |

Table 4.10 shows that, the major challenge faced by the poultry hawkers was low patronage indicated by most of the respondents (66%). Barely 10% of them complained about insufficient capital to sustain the business, while almost 7% complained about diseases. About 17% of the hawkers were satisfied.

Table 4.10: Distribution of hawkers according to challenges faced in the business

| Challenge | Frequency | Proportion (%) |
|----------------------|-----------|----------------|
| Insufficient capital | 3 | 10.34 |
| Low market | 19 | 65.52 |
| Diseases | 2 | 6.90 |
| Satisfactory | 5 | 17.24 |

Table 4.11 shows how the challenges faced by the poultry hawkers could be overcome. About 62% of the hawkers believed that the challenges were natural; man has no control over them. However, about 17% of them suggested that support from government could help provide sufficient capital to run the business. Slaughtering of infected birds was believed to be a remedy by about 10% of the hawkers while the remaining 10% were undecided.

Table 4.11: Distribution of hawkers according to how the challenges can be overcome

| How to overcome | Frequency | Proportion (%) |
|-------------------------------|-----------|----------------|
| From God | 18 | 62.08 |
| Government support | 5 | 17.24 |
| Slaughtering infected Animals | 3 | 10.34 |
| Undecided | 3 | 10.34 |
| Total | 29 | 100 |

Conclusion

Hawking of fowls and eggs at the two study sites has been on for decades, but with little return to the hawkers. Nonetheless, the hawkers look forward to brighter future

Suggestion

Future research should aim at critically examining the relationship between the hawkers and rural collectors, with a view to identifying the sources (flocks) of the domestic fowls and intervening for higher stock off take.

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Biographical Note: W Akin Hassan is a Professor in Animal Genetics and Breeding. He is working with Usmanu Danfodiyo University Sokoto under the Department of Animal science. He is presently the Dean of Faculty of Agriculture.

Biographical Note: Umar I.M. read Agricultural Sciences from Usmanu Danfodiyo University Sokoto. He graduated with second class upper and He is a registered Animal Scientist. He is presently working as a Lecturer with Federal Polytechnic, Kaura Namoda, Zamfara State.

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