Production System of Native Chicken in Dumarao, Capiz

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Abstract

This study was conducted to determine the production systems of Native Chicken raisers in the Municipality of Dumarao, Capiz, the socioeconomic and demographic characteristics of chicken raisers; native chicken's productive performance; breeding and selection; animal health and sanitation practices; support services extended to the raisers; and the availability and utilization of botanical dewormer. A total of 825 respondents from 33 barangays of Dumarao, Capiz were interviewed using a structured questionnaire. Data were summarized, tabulated and, analyzed using frequencies and percentages. Majority of the raisers were 45-60 years old and mostly in secondary level; Farming has been the main source of income and has been engaged in native chicken raising for 45-60 years. Most of the respondents are farm owners having a maximum land area of one hectare. Most of the chicken populations were female chicks, separated at 2 months from the hen, and become sexually mature at 5 months which lays an egg at 6 months old. Native Chicken was raised mainly for eggs and sells their chicken as live in the market. Generally, raisers do not practice breeding and selection instead they are into natural and uncontrolled system. Most raisers have attended seminars and training of CAPSU Dumarao and NGO and have received chicken dispersal program from NGO's. Most raisers do not practice treatment, vaccination and deworming. Natural or Botanical Dewormer were available in the area, however, a few use commercial dewormer since it's easily available in the market.

Keywords: Darag, Native Chicken, production system

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Introduction

Philippine native chicken has been the main source of meat and eggs for Filipino. It is unparalleled ability to produce meat and eggs under minimal management, intervention, and inputs have led to its large population and popularity. The role of indigenous chicken in Philippine agriculture and the entire economy is well-recognized. It will, to a large extent, remain a significant contributor to the continuous supply of meat and eggs and extra income for many rural Filipino farmers. Its meat is highly preferred by many Filipino consumers because of its distinct taste, leanness, and pigmentation. As of 1996, more than 60% of the total inventory of chickens in the Philippines consists of the pure native and upgraded native chicken which is mostly raised under backyard condition (Lambio et al., 1996 as cited by Dusaran & Pabulayan, 2015).

For many years, the native chicken production in Western Visayas has been a common livelihood for many farmers. It provides them additional income as well as a source of protein. It serves as a form of savings or insurance for the farmers against periodic shortages as well as for resource diversification. Nowadays, native chicken is being displaced in the supply chain by hybrid chickens. This is, however, an opportunity for small-scale farmers to raise native chicken and generate incremental benefits by supplying the emerging market for this commodity (Dusaran & Cabarles, 2005 as cited by Dusaran & Pabulayan, 2015).

The study was conducted to find out the production systems of native chicken raisers in Dumarao, Capiz. Specifically, the study sought to answer the following questions: 1) What are the socio-demographic characteristics of Native Chicken raisers?; 2) What is the productive performance of Native Chicken raised in the Municipality of Dumarao, Capiz?; 3) What are the breeding, selection systems, animal health adaptation and sanitation practices of the native chicken raisers?; 4) What are the support services extended to Native Chicken raisers?; and 5) Did the farmers utilize botanical dewormer to control the helminths of their chicken?

The findings of this study can serve as a basis for the policymakers, research, development, and extension workers to give emphasis for further improvement on the production systems of raising native chicken and disseminate the availability and uses of botanical dewormer.

Materials and Methods

The study was conducted in 33 barangays in Dumarao, Capiz. An interview schedule was used to gather the data with a structured survey form, record book, ball pens, pencils, and digital camera. A total of 825 respondents were interviewed. Random sampling method was used to determine the 25 poultry raisers. The questionnaire was written in English but was translated in Hiligaynon during the survey.

Data Gathering Procedure

Data gathered were summarized, tabulated, analyzed and interpreted. Frequencies and the percentages were used in analyzing the data.

Conceptual Framework

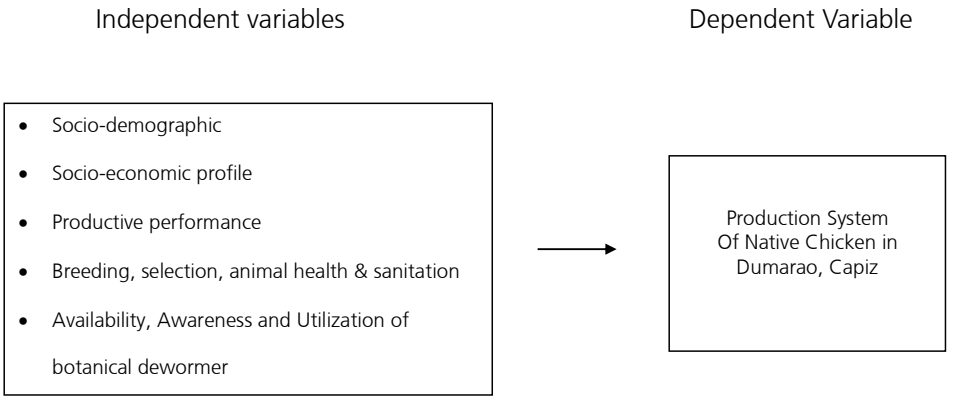

Figure 1. A schematic diagram which illustrates the relationship between the independent and dependent variables.

Results and Discussion

Socio-Demographic Profile of the Respondents

Majority of the Native Chicken raisers (52.84%) belong to the age bracket of 45-60 years. Many of them finished the secondary level (41. 45%) and engaged in farming (46.91%) as their primary source of income while few of them (4.73%) have a small business like a sari-sari store (Table 1). On the other hand, mothers (45.45%) were assigned in the care of the native chicken since most of the father had a full-time into farming.

As shown in Table 2, many of the raisers earned a monthly income of Php 5001-6000 (20.61%), followed by Php 3001-4000 (17.82%), Php 4001-5000 (17.21%), then 2001-3000 (14.67%), Php 6001-10000 (14.30%); then Php 10001-15000 (7.03%), Php 15001 above (6.30%), and Php 1000-2000 (2.06%). Only (25.98%) raised native chicken for 10-20 years and almost half of them raised for 21-30 years (48 %) and at 31-40 years (26.06%). Mostly own one hectare of land (50.42%); 3 hectares (14.79%), and 2 hectares (34.79%).

Table 1.0 Socio-demographic profile of the respondents.

	Frequency	Percentage
Age		
13-28 years old	92	11.15
29-44 years old	242	29.33
45-60 years old	336	40.73
61 above	155	18.79
Total	825	100%
Educational Attainment		
None	0	0
Elementary	124	15.03
Secondary	342	41.45
Vocational	134	16.24
College	117	14.18
Post-Graduate	108	13.09
Total	825	100%
Occupation		
Farming	387	46.91
Laborer	191	23.15
Business	39	4.73
Employment	91	11.03
Pension	117	14.18
Total	825	100%
Animal Caretaker		
Father	276	33.46
Mother	375	45.45
Son	76	9.21
Daughter	98	11.87
Total	825	100%

Table 2.0 Socio-Economic Profile of the Respondents

	Frequency	Percentage
Monthly Income		
1000-2000	17	2.06
2001-3000	121	14.67
3001-4000	147	17.82
4001-5000	142	17.21
5001-6000	170	20.61
6001-10000	118	14.30
10001-15000	58	7.03
15001 above	52	6.30
Total	825	100%
Number of Years Raising Native Chicken		
10-20 years	214	25.98
21-30 years	396	48
31-40 years above	215	26.06
Total	825	100%
Tennurial Status of the Farm		
Owner	480	58.18
Rent	185	22.42
Tenant	160	19.39
Total	825	100%
Size of the Farm		
1 hectare	416	50.42
2 hectare	287	34.79
3 hectare and above	122	14.79
Total	825	100%

Production System of Native Chicken

Most of the populations were female chicks (24.95%) due to the genetic make-up of the breeder hen that brought out the female offspring, male grower (21.33%), male chicks (18.37), young females (15.54%), pullet (10%), female breeder (6.66%), and male breeder of (2.49%). Most of the breed is cross (49.45%), native (36.12%), and upgraded chicken (14.42%) since some of the raisers are engaged in cockfighting (Table 3). Most of the respondents sold 1-50 heads (42.59%) of native chicken per year, 51-100 (39.51%), and 101-200 (2.79%). Raiser claimed that there is no problem in terms of market availability of native chicken (88.42%), sometimes there is a problem (10.67%), and there is always a problem (1.09%). Native chicken raised for egg (49.09%) also for meat (48.85%) and few as a source of income (2.06%).

Table 3.0 Production System of Native Chicken Raised in the Municipality of Dumarao, Capiz

	Frequency	Percentage
Flock Structure		
Male Breeder (>6 mos.)	884	2.49
Male Grower (>3 m0s.)	7561	21.33
Male Chick (1-3 mos.)	6512	18.37
Female Breeder (.6 m0s.)	2359	6.66
Pullets (>5 mos.)	3774	10.65
Young Female (1-3 mos.)	5509	15.54
Female Chicks (0-1 mos.)	8844	24.95
Total	35443	100%
Breed Native	298	36.12
Grade	119	14.42
Cross	408	49.45
Total	825	100%
Animal Sold Per Year		
1-50 heads	353	42.79
51-100 heads	326	39.51
101-200 heads	146	17.70
Total	825	100%
Market Availability of Native Chicken		
Always a Problem	9	1.09
Sometimes Problem	88	10.67
No Problem	728	88.24
Total	825	100%
Purpose of Raising Native Chicken		
Egg	405	49.09
Meat	403	48.85
Source of Income	17	2.06
Total	825	100%
Selling of Native Chicken		
Live	825	100
Carcass	0	0
Total	825	100%

Productive Performance

The respondents observed that native chicken weaned their chicks at 2 months old (42.55%), one-month-old (40.12%), and very few (17.33%) at 3 months above. Almost half (44.12%) claimed that six months is the sexual maturity of native chicken, and sexual maturity occurs at 5 months (28.12%), and below few at 7 months and above (28.12%). The respondents observed that the Native Chicken first laying starts at 6 months old (44.12%), of them said at 7 months above (28.12%)

and the remaining 27.76 percent at 5 months old and below. (See Table 4).

Table 4.0 Productive performance of Native Chicken Raised in Municipality of Dumarao, Capiz.

	Frequency	Percentage
Weaning Age		
1 month	331	40.12
2 month	351	42.55
3 months and above	143	17.33
Total	825	100%
Sexual Maturity		
5 months and below	229	27.76
6 months	364	44.12
7 and above	232	28.12
Total	825	100%
Age of First Laying		
5 months and below	229	27.26
6 months	364	44.12
7 and above	232	28.12
Total	825	100%

Breeding, Selection, Animal Health, Sanitation and Adaptation Practiced by Raisers

More than half (56.73%) of the raiser practiced breeding and selection while the rest do not (43.27%). Crossbreeding (60.12%) is mostly used and upgrading (39.88%) method in chicken production. Raisers practiced natural and uncontrolled system (99.64%) than natural and control system (0.36%). (see Table 5.0)

Animal Health & Sanitation

Among the classification of diseases that affects native chicken, Newcastle disease cause 100% mortality among flocks, followed by skin disease (24.27%) due to external parasite and other environmental factor, fever (23.63%), and intestinal parasite (21.44%). (see Table 6.0)

Activity Performed on Chicken

The entire respondents (100 %) do not practice any identification method as well as caponization to their flock. Most of the respondents (99.39%) do not practice decombing while the rest (0.61%) claimed that they decomb their rooster particularly those raised for cockfighting. Majority of the respondents (98.66%) do not practiced regular deworming while 1.33 percent claimed that they dewormed their chickens with botanical plants like fresh betel nut and of commercial dewormer. All of them

(100%) do not practice vaccination method to their flock.(see Table 6.0)

Support, Services, Assistance and Seminar

All the raisers do not have a credit assistance for their native chicken. Most (91.27%) of them is a recipient of Chicken Dispersal of Red Cross for Yolanda victims. More than half (57.58%) have attended a training and seminar rendered by the CapSU Dumarao. (see Table 7.0)

Availability and Awareness and Utilization of Botanical Dewormer

Raisers are aware of botanical plants that have deworming properties like betel nut were only (42.42%), while more than half of them (57.58%) were not aware of using the Botanical Dewormer in their flocks. (see Table 7.0)

Only (1.82%) of the raisers were utilizing Botanical Dewormer in their Native Chicken, according to them they are using fresh betel nut as a dewormer to their flocks. While the (98.18%) of the raisers are not utilizing botanical dewormer because of the lack of knowledge and others complained that after using fresh betel nut their chicken died. (see Table 8.0)

Conclusions

Based on the findings of the study, the researchers draw the following conclusions:

1. Native chicken raisers belong to the age bracket of 45-60 years old, have reached secondary level of education, farmers, and mothers who take care of the their flocks.

2. Raisers have a monthly income of Php 5001-6000. Nearly one-half of the raisers have been raising their Native Chicken for 21-30 years. Most of them are the owner of farm with the land area of 1 hectare.

3. All respondents do not / very few practice any identification, caponizing, decombing, and vaccination to their flock.

4. Most of the raisers do not engage in any private or government agency that offer Credit Assistance in raising their native chickens, and claimed that there is no problem in selling their Native Chicken at the market; they sold their chickens in live.

5. Very few of the raisers are aware to use botanical dewormer in their Native chicken and these raisers are using "Bunga" as a dewormer and according to them they are using fresh betel nut as a dewormer to their flocks.

Recommendations

The following recommendations are forwarded:

1. Based on the location of the native chicken raisers, majority of the area is good for production of native chicken. And also promote the improvement of the housing; adopt the breeding system to improve the production. Therefore, the government should give assistance to the raisers and conduct seminars to improve the production of the native chicken in the Municipality of Dumarao, Capiz.

2. With a high mortality during the outbreaks of the diseases, the raisers and other poultry farms should follow the correct procedure of vaccination to reduce and minimize mortality in their flocks.

3. Native chicken raisers must also consult animal technicians, and veterinarians. Government and private agencies concerned with the animal industry must help educate local raisers on proper production systems as well as marketing for profitable chicken production.

4. Massive dissemination of IEC materials.

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