# PRODUCTION PRACTICES OF THE NATIVE CHICKEN GROWERS IN WESTERN VISAYAS

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### **ABSTRACT**

This study was conducted to determine the production practices of the native chicken growers in the top three native chicken municipalities of all provinces in Western Visayas. This is a purely descriptive study that utilized the one-shot survey design. Multi-stage sampling technique was used to identify the study respondents. Face to face interview of the native chicken raisers was conducted. Data analysis was purely descriptive. Results show that there are specific areas in the region where the production of native chicken predominates. The income of the native chicken growers is relatively low since native chicken production is still a backyard family economic undertaking with limited marketable product volume. The growers have an average of 16.2 heads of hens and 4.4 heads of roosters for breeding. Their breeders, mostly home grown, were mostly upgraded native chicken, followed by Darag and Jolo. Native chickens are generally raised in free range. The usual feedstuffs consisting of corn/cracked corn, rice bran, home mixed ration, filled/unfilled palay and rice/milled rice were more or less the same for pullets, cockerels, hens and roosters but amount varies depending on the stage of growth of chickens. These feeds are generally broadcast on the ground. Higher incidence of mortality peaking in June was largely attributed to change in climate, diseases and pests. Generally, the growers did not vaccinate but they provided their native chickens with substances for disease prevention and control. More pullets and cockerels are sold and seasonality was also observed. The native chicken growers have plans for expansion.

Keywords: Native Chicken, upgraded native chicken, production practices

#### INTRODUCTION

Philippine native chicken has been the main source of meat and eggs for Filipino farmers (World Poultry, 2000 in Dusaran & Cabarles, 2005). Its unparalleled ability to produce meat and eggs under minimal management, intervention and inputs has 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 chicken in the Philippines consist of the pure native and upgraded native chicken which are mostly raised under backyard condition (Lambio, Bondoc, & Grecia (1996) in Dusaran & Cabarles, 2005). Demand for poultry meat was increasing every year that the projected demand will be around 570,000 metric tons in 2005. The Filipino domestic per capita consumption of chicken meat was also increasing from 3.33 kg in 1990 to 6.75 kg in 1998 (Dusaran & Cabarles, 2005).

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 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.

In 2005, Dusaran and Cabarles conducted a study to determine the status of native chicken production in Calinog, Passi City, and Barotac Nuevo, the top native chicken producing local government units in Iloilo. On-the-spotvisit and interview were done to collect the needed data.

Results of the study showed that the respondents started the project with meager capital and had an estimated weekly income and profit of PhP 100.00 to PhP 500.00. Drastic change in climate was mentioned as the major cause of disease occurrence. Common cultural practices and even antibiotics and herbals were used to control the malady. Birds weighing 500 to 1,000 grams were the most in demand in the local market. High demand for chicken was observed from September to December while least demand was from July to August. Most of the raisers did not keep any record and had no consultant for their project. They encountered various problems and wanted to know more

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about preparation of project feasibility studies and record keeping, and acquire basic knowledge on raising native chicken. They also believe that proper care and management of the birds is the key to successful native chicken production.

The native chicken has evolved in a way that it multiplied and survived in a marginal environment even with minimal management. More importantly, the meat of the native chicken has a unique flavor and texture which consumers prefer and for which they are willing to pay a premium price. The native chicken will, undoubtedly, remain an important source of high-quality protein food and additional income for many of our small rural farmers (Prodigo, Oren & Arostique, 2005).

This study was conducted to determine the production practices of the native chicken growers in the top three native chicken producing municipalities in the six provinces of Western Visayas.

#### METHODOLOGY

This is a purely descriptive study that utilized the one-shot survey design. The study focused only on gathering data that can establish the production practices of the native chicken raisers in the top three native chicken producing municipalities in the six provinces of Western Visayas.

Multi-stage sampling technique was used in this study. In the first stage, the top three municipalities with the most number of chicken population for the six provinces in Region VI were identified with the assistance of the respective Provincial Veterinary Officer. In the second stage, the top three barangays per identified municipality were chosen with the assistance of the respective Municipal Agriculture Officer. Finally, the native chicken growers raising at least 20 heads of native chicken were selected from each of the sample barangays.

The top three municipalities were identified with the help of the Office of the Provincial Veterinarians of the provinces covered by the study. The assistance of the Office of the Provincial Veterinarians of the different provinces were also solicited in identifying interviewers or data collectors from the different municipalities covered by the study. Face-to-face interview of the native chicken raisers, traders and processors was conducted. Data analysis was purely descriptive.

#### RESULTS AND DISCUSSION

# Profile of Respondents

The native chicken raising-respondents were mostly from Antique (32.2%) and least from Guimaras (7.9%). They were generally above 30 years old (91.2%) with a mean age of 49.3 years. The respondents from Capiz appeared to be relatively older with a mean age of 51.4 years while the respondents from Negros Occidental seemed to be younger with a mean age of 47.0 years. They were mostly elementary educated (38.8%) particularly those in Negros Occidental (52.1%) or high school educated (36.6%) particularly those in Aklan (50.6%). In Iloilo, about one-third (32.9%) of the respondents were college educated (Table 1).

The major occupation of the respondents was generally (74.4%) farming. This was particularly true to all the provinces in the region but the greatest proportion (89.6%) of raisers were farmers in Capiz with the least (29.5%) in Guimaras. From their major occupation, the respondents received an average income of Php 4,155.8 per month but most (46.4%) received a monthly estimated income of Php 3,000.00 and below. The highest mean income per month (Php 5,689.40) was recorded in Guimaras while the lowest (Php 3,083.60) was in Negros Occidental (Table 1).

From their native chicken production, the respondents earned an average of Php 1,002.50 per month with most of them (43.9%) earning Php 500.00 and below. This is specific for Capiz, Iloilo and Aklan where most (40.0%, 51.4% and 63.2%, respectively) of the respondents were earning Php 500.00 and below. In Negros Occidental and Antique most raisers (58.3% and 45.0%, respectively) were earning Php501.00 to Php1,000.00 per month while in Guimaras, most (27.8%) were earning more than Php 2,000.00 per month (Table 2).

As observed, a greater proportion of the respondents in Aklan were on the lower income categories compared to those in Guimaras who were on higher income categories. This is consistent with the findings that respondents from Guimaras had the highest mean income (Php 2,143.30) as against those in Aklan with the lowest (Php 697.50).

On the average, income from native chicken has a potential to contribute about a quarter (24.1%) to the respondents' income from their major occupation. The propensity to augment income from native chicken was observed to be highest in Guimaras (37.7%) and lowest in Antique (18.4%).

The respondents had been into native chicken production for an average of 17.5 years with most of them (38.0%) involved for 10 years and below. Except for the Capiz respondents who were on the larger experience category, those from other provinces had mostly native chicken production experience 10 years or below. The Capiz respondents, had been raising native chicken for 21.1 years on the average, whereas to the Guimaras respondents had been at it for only 14.3 years (Table 2).

## Native Chicken Production Practices

Breeding. The native chicken raisers had an average of 16.2 heads of hens and 4.4 heads of roosters for breeding or an average of 1 rooster to 4 hens. In terms of female breeders, most of the respondents (50.8%) had 11 to 20 heads of hens with those from Capiz having the largest (22.3 hens) and Aklan with the smallest (12.6 hens) mean number of hens. In terms of male breeders, more than one-third (37.3%) had 3 to 5 heads of roosters with the Antique respondents having the largest (5.7 roosters) and those from Negros Occidental having the smallest (2.9 roosters) mean number of roosters.

The female breeders were mostly (44.3%) upgraded native chicken followed by Darag (34.2%), Jolo (28.9%), and mongrels (18.8) while their male breeders were also mostly (40.9%) upgraded native chicken followed by Jolo (30.3%), Darag (25.1%) and Mongrels (15.6%).

Provincial comparison shows that in Capiz, the majority of the growers (55.2%) used mongrels as female breeders and most (46.9%) also used mongrels as male breeders (Table 3). In Negros Occidental, the majority (67.1% and 63.0%) used Jolo as female and male breeders, respectively. Similar practice was also done in Guimaras. In Antique, most of the growers used upgrades as hens (45.5%) and roosters (42.2%). In Iloilo, the majority (63.5% and 56.8%) of the growers used upgrades and darag hens, respectively, and upgrades (60.8%) and Jolo (58.1%) roosters (Table 3). These breeders were generally home grown (76.3%). The same trend was observed in all the provinces in the region (Table 4). Aklan, however, had the greatest proportion of growers (96.7%) with home grown breeders while Guimaras had the least (45.5%).

Means of raising. The native chicken raisers generally grew native chicken on free range basis (61.1%). This is most particularly true in Negros Occidental (90.5%) but not in Aklan where the majority (63.7%) of the growers were raising their native chickens under free-range and semi-confinement schemes (Table 4).

Table 1. Distribution of Respondents According to Their Profile (N=558)

Age Below 31 years old 31 to 40 years old 41 to 50 years old 51 to 60 years old							LIOVIIICE						$\Gamma_0$	Total
	Ca	Capiz	Neg	Negros	Guin	Guimaras	Ant	Antique	Iloilo	ilo	Ak	Aklan		
	J	%	J	%	J	%	J	%	f	%	J	%	f	%
31 to 40 years old 41 to 50 years old 51 to 60 years old	7	2.1	Ξ	15.1	4	9.1	18	10.0	9	8.1	8	8.8	49	8.8
41 to 50 years old 51 to 60 years old	19	19.8	13	17.8	13	29.5	29	16.1	18	24.3	19	20.9	111	19.9
51 to 60 years old	31	32.3	18	24.7	6	20.5	44	24.4	15	20.3	29	31.9	146	26.2
	18	18.8	23	31.5	6	20.5	51	28.3	17	23.0	21	23.1	139	24.9
Above 61 years old	26	27.1	8	11.0	6	20.5	38	21.1	18	24.3	14	15.4	113	20.3
Mean	51	51.4	4	0.7	4	8.1	5(	).2	49.	.7	47	47.4	45	49.3
Educational Attainment														
Elementary level	37	38.5	38	52.1	16	36.4	69	38.5	22	30.1	33	37.1	215	38.8
High school level	34	35.4	16	21.9	11	25.0	77	43.0	20	27.4	45	50.6	203	36.6
College level	24	25.0	15	20.6	12	27.3	28	15.6	24	32.9	10	11.2	113	20.4
Occupation														
No answer	0	0.0	0	0.0	П	2.3	4	2.2	7	2.7	3	3.3	10	1.8
Farming	98	9.68	51	6.69	13	29.5	147	81.7	61	82.4	57	62.6	415	74.4
Others	10	10.4	22	30.1	30	68.2	59	16.1	Π	14.9	31	34.1	133	23.8
Monthly Income														
No answer	29	302	7	9.6	11	25.0	9	3.3	5	6.7	25	27.5	83	14.9
Php3,000 & below	40	59.7	45	61.6	11	25.0	71	39.4	46	62.2	46	50.5	259	46.4
Over Php 3,000	27	28.1	21	28.8	22	50.0	103	57.2	23	31.1	20	22.0	216	38.7
Mean	532	5323.9	308	3083.6	368	5689.4	431	4315.9	3835.6	9.5	318	3187.9	414	4155.8
E	96	100	73	100	44	100	180	100	74	100	91	100	258	100
I otal	96	17.2	73	13.1	44	7.9	180	32.2	74	13.3	91	16.3	558	100

Table 2. Distribution of Respondents According to Monthly Income (Php) from Native Chicken Production and Native Chicken Production Experience (N=558)

						Pro	Province						Ē	Total
Category	Ü	Capiz	ž	Negros	Gui	Guimaras	An	Antique	Ī	Hoilo	A	Aklan		raı
	f	%	f	%	f	%	f	%	f	%	J	%	J	%
Native Chicken Producti	ion Inco	Income (Php	<u>ا</u>											
No Answer	П	1.0	_	1.4	~	18.2	69	38.3	4	5.4	4	4.4	87	15.6
500 and Below	38	40.0	21	29.2	8	22.2	49	44.1	36	51.4	55	63.2	207	43.9
501-1000	31	32.6	42	58.3	6	25.0	50	45.0	19	27.1	6	10.3	160	34.0
1001-1500	3	3.2	4	5.6	3	8.3	3	2.7	5	7.1	16	18.4	34	7.2
1501-2000	14	14.7	5	6.9	9	16.7	5	4.5	4	5.7	5	5.7	39	8.3
2000 & Above	6	9.5	0	0.0	10	27.8	4	3.6	9	8.6	2	2.3	31	9.9
Mean	13.	1355.3	òò	828.5	21	43.3	79	794.9	8	824.6	9	697.5	100	12.5
Native Chicken Producti	ion Exp	on Experience (years)	(years	_										
No answer	10	10.4	3	4.2	0	0.0	20	11.1	2	2.7	2	2.2	37	9.9
10 years and below	22	22.9	33	45.2	25	56.8	69	38.3	26	35.1	37	40.7	212	38.0
11 to 20 years	27	28.1	19	26.0	10	22.7	41	22.8	18	24.3	34	37.4	149	26.7
21 to 30 years	21	21.9	6	12.3	4	9.2	30	16.7	15	20.3	11	12.1	06	16.1
31 to 40 years	11	11.5	7	9.6	3	8.9	Ξ	6.1	∞	10.8	4	4.3	44	7.9
Above 40 years	5	5.2	7	2.7	7	4.5	6	5.0	2	8.9	3	3.3	26	4.7
Total	96	100	73	100	44	100	180	100	74	100	91	100	558	100
Mean	,	71.1	_	15.6		143		171	,	201	_	15.5	÷	17.5

Table 3. Distribution of Respondents According to their Breeders (N=558)

							Province	ince						
Categories	Capi	Capiz (96)	Negr	Negros (73)	Guima	Guimaras(44)	Antique(180)	1e(180)	Iloil	Hoilo (74)	Akl	Aklan(91)	To	Total
	J	%	J	%	J	%	J	%	J	%	J	%	J	0%
Number of Hens														
No answer	0	0.0	_	1.4	_	2.3	4	2.2	0	0.0	_	1.1	7	1.2
10 and Below	15	15.6	33	45.8	21	48.8	57	31.7	_	1.4	39	43.3	991	30.1
11-20	40	41.7	28	38.9	14	32.6	76	53.8	59	7.67	42	46.7	280	50.8
More than 20	41	42.7	11	15.3	8	18.6	22	12.2	14	19.0	6	10.0	105	19.0
Mean	2	2.3	1	2.8	1	4.9	14	6.1	1	8.6	1	2.6	16	.2
Number of Roosters														
No answer	0	0.0	4	5.5	1	2.3	4	2.2	_	1.3	1	1.1	11	2.0
2 and Below	39	40.6	31	42.5	27	61.4	50	27.8	19	25.7	30	33.0	196	35.1
3-5	45	43.8	34	46.6	11	25.0	46	25.6	31	41.9	4	48.3	208	37.3
More than 5	15	15.6	4	5.5	5	11.4	80	4.4	23	31.1	16	17.6	143	25.6
Mean	8	6.5	7	6.3	3	3.		7.	4	ĸ;	63	1.7	4	4
Strain (Hens)														
Upgrade	17	17.7	39	53.4	21	47.7	82	45.5	47	63.5	41	45.1	247	44.3
Darag	33	34.4	22	30.1	С	8.9	99	31.1	42	8.99	35	38.5	191	34.2
Jolo	7	7.3	49	67.1	31	70.4	56	14.4	39	52.7	6	6.6	161	28.9
Mongrels	53	55.2	∞	11.0	7	4.5	5	2.8	∞	10.8	29	31.9	105	18.8
Native	0	0.0	10	13.7	-	2.3	28	15.6	0	0.0	21	23.1	09	10.8
Others	1	1.0	П	1.4	-	2.3	0	0.0	7	2.7	3	3.3	8	1.5
Strain (Rooster)														
Upgrade	13	13.5	33	45.2	20	45.4	9/	42.2	45	8.09	41	45.1	228	40.9
Jolo	14	14.6	46	63.0	27	61.4	36	20.0	43	58.1	3	3.3	169	30.3
Darag	25	26.0	9	8.2	1	2.3	43	23.9	31	41.9	34	37.4	140	25.1
Mongrels	45	46.9	Э	4.1	0	0.0	4	2.2	7	9.4	28	30.8	87	15.6
Native	0	0.0	6	12.3	_	2.3	78	15.6	0	0.0	16	17.6	\$	6.7
Others	0	0.0	-	1.4	0	0.0	0	0.0	-	1.4	2	2.2	4	8.0
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Feeds and feeding. The usual feed stuffs given by the raisers to their native chickens were almost the same for pullets, cockerels, hens and roosters. For pullets, the most common feed stuff was corn/crack corn (40.7%), rice bran (37.1%), home mixed ration (33.3%), filled/unfilled palay grains (20.6%) and rice/milled rice (20.6%). Only 14.7% used commercial formulation.

Except in Antique and Iloilo, corn/crack corn was the major feedstuff for pullets in other provinces. The majority (56.1%) of the Antique raisers used home-mixed ration while those in Iloilo, where the majority (68.9%) used rice bran (Table 5).

For cockerels, the most common feed stuff was also corn/crack corn (41.2%), rice bran (37.5%), home mixed ration (31.2%), rice/milled rice (20.6%), filled/unfilled palay (20.4%) and commercial formulation (15.8). Just like with pullets, all the raisers in other provinces except Antique and Iloilo used corn/crack corn as major feedstuff for cockerels. In Antique, the majority (55.6%) of the growers also used home mixed ration but in Iloilo, the majority (68.9%) used rice bran.

The feed stuffs given to hens were quite similar. The most common was still corn/crack corn (42.3%), rice bran (37.6%), home mixed ration (31.0%), rice/milled rice (21.1%), filled/unfilled palay grains (20.1%) and commercial formulation (16.5%). The majority of the raisers in Capiz (63.5%), Negros Occidental (50.7%), Guimaras (59.1%) and Aklan (51.6%) used corn/crack corn. The majority (70.3%) of the raisers in Iloilo and Antique (53.9%) used rice bran and home mixed ration, respectively.

These were the same observations for the roosters. Corn/crack corn was the prevalent feed stuff (41.4%) followed by rice bran (37.6%), home mixed ration (31.0%), rice/milled rice (20.6%), filled/unfilled palay grains (20.3%) and commercial formulation (16.5%). Across provinces in the region, the same trend was observed (Table 5).

The native chicken raisers generally (66.5%) spread feeds on the ground for the chickens to eat. This practice was most popular (90.4%) among the respondents in Negros Occidental and least common (54.1%) among those in Iloilo (Table 4).

The volume of feeds given to native chickens varied according to their growth stage (Table 6). For pullets, most of the growers (30.8%) provided 50 grams of feeds and below per bird per day with a mean of 71.1 grams per bird/day. The Capiz respondents reported the highest mean amount of 114.8 grams per day, those in Aklan reported the lowest (45.8 grams).

Table 4. Distribution of Respondents According to their Means of Acquisition of their Breeding Stocks and Means of Raising and Means of Feeding Native Chicken (Multiple Response N=558)

							$Pr_0$	Province						
Categories	Ca	Capiz	Ne	Negros	Gui	Guimaras	Ant	Antiq ue		Iloilo	A	Aklan	T	Total
	J	%	J	%	J	%	f	%	f	%	J	%	J	%
Means of breeding stock acqu	equisition													
	64	2.99	09	82.2	20	45.5	143	79.4	51	689	88	6.7	426	76.3
From friends/neighbors	31	32.3	14	19.2	19	43.2	32	17.8	26	35.1	59	64.8	181	32.4
Buy in the market	17	17.7	7	9.6	10	22.7	9	3.3	17	23.0	11	12.1	89	12.2
Others	7	2.0	7	2.7	0	0.0	0	0.0	4	5.5	1	1.1	6	1.6
Means of Raising														
No answer	0	0.0	0	0.0	_	2.2	2	1.1	0	0.0	0	0.0	7	0.4
Free range	29	8.69	99	90.5	19	43.2	110	61.1	46	62.2	33	36.3	341	61.1
Semi-confinement	3	3.1	2	8.9	Ξ	25.0	44	24.4	9	8.1	0	0.0	69	12.4
Complete confinement	0	0.0	0	0.0	0	0.0	_	9.0	_	1.4	0	0.0	2	0.4
Mixed	26	27.1	7	2.7	13	29.5	23	12.8	21	28.4	58	63.7	144	25.8
Means of Feeding														
No answer	_	1.0	-	1.4	0	0.0	4	2.2	0	0.0	_	1:1	7	1.3
Broadcast	69	71.9	99	90.4	25	56.8	115	63.9	40	54.1	99	61.5	371	66.5
Use of feeding trough	0	0.0	2	2.7	8	18.2	6	5.0	7	9.5	0	0.0	79	4.6
Broadcast & feeding through	26	27.1	4	5.5	Ξ	25.0	52	28.9	27	36.5	8	37.4	154	27.6
Total	96	100	73	100	4	100	180	100	74	100	16	100	858	18

Table 5. Distribution of Respondents According to their Usual Feedstuff for Native Chicken (Multiple Response, N=558)

							Pr	Province						
Usual Feeds	C	Capiz	Ne	Negros	Guir	Guimaras	Ant	Antiq ue	П	Hoilo	Ak	Aklan	T	Total
	÷	%	J	%	J	%	f	%	f	%	f	%	÷	%
Pullets Feedstuff														
Corn/crack corn	59	61.5	36	49.3	21	47.7	34	18.9	32	43.2	45	49.4	227	40.7
Rice bran	54	56.2	12	16.4	15	34.1	34	18.9	51	6.89	41	45.1	207	37.1
Home mixed ration	16	16.7	56	35.6	-	2.3	101	56.1	c	4.1	39	42.9	186	33.3
Filled/unfilled palay	38	39.6	_	1.4	3	8.9	55	30.6	0	0.0	18	19.8	115	20.6
Rice/milled rice	42	43.7	3	4.1	3	8.9	2	1:1	42	56.8	22	24.2	115	20.6
Commercial formulation	Ξ	11.5	15	20.5	_	15.9	15	8.3	=	14.9	23	25.3	82	14.7
Others	0	0.0	0	0.0	25	56.8	0	0.0	_	1.4	41	45.1	29	12.0
Cockerels Feedstuff														
Corn/crack corn	59	61.5	36	49.3	22	50.0	35	19.4	30	40.5	48	52.7	230	41.2
Rice bran	99	58.3	11	15.1	15	34.1	35	19.4	51	6.89	41	45.1	209	37.5
Home mixed ration	17	17.7	25	34.2	_	2.3	100	55.6	3	4.1	28	30.8	174	31.2
Rice/milled rice	44	45.8	2	8.9	3	8.9	2	1.1	40	54.1	21	23.1	115	20.6
Filled/unfilled palay	38	39.6	7	2.7	3	8.9	99	31.1	0	0.0	15	16.5	114	20.4
Commercial formulation	11	11.5	15	20.5	7	15.9	16	8.9	11	14.9	28	30.8	88	15.8
Others	0	0.0	0	0.0	25	56.8	0	0.0	-	1.4	45	46.2	89	12.2
Hens Feedstuff														
Corn/crack corn	61	63.5	37	50.7	26	59.1	35	19.4	30	40.5	47	51.6	236	42.3
Rice bran	59	61.5	Ξ	15.1	24	54.5	36	20.0	52	70.3	37	40.7	210	37.6
Home mixed ration	19	19.8	56	35.6	_	2.3	6	53.9	c	4.1	27	29.7	173	31.0
Filled/unfilled palay	34	35.4	7	2.7	33	8.9	57	31.7	0	0.0	16	17.6	112	20.1
Rice/milled rice	48	50.0	S	8.9	33	8.9	2	1.1	40	54.1	20	22.0	118	21.1
Commercial formulation	11	11.5	15	20.5	6	20.5	17	9.4	11	14.9	53	31.9	92	16.5
Others	0	0.0	0	0.0	23	52.3	0	0.0	_	1.4	39	42.9	63	11.3
Roosters Feedstuff														
Corn/crack corn	09	62.5	36	49.3	25	56.8	34	18.9	31	41.9	45	49.4	231	41.4
Rice bran	59	61.5	11	15.1	15	34.1	36	20.0	51	6.89	38	41.8	210	37.6
Home mixed ration	19	19.8	25	34.2	_	2.3	26	53.9	n	4.1	28	30.8	173	31.0
Filled/unfilled palay	35	36.5	7	2.7	3	8.9	57	31.7	0	0.0	16	17.6	113	20.3
Rice/milled rice	46	47.9	4	5.5	3	8.9	2	1:1	40	54.1	20	22.0	115	20.6
Commercial formulation	= <	11.5	4 0	19.2	10	22.7	18	10.0	10	13.5	29	31.9	92	16.5
Others	٥	0.0	اء	0.0	77	20.0	اء	0.0	-	4.I	30	59.0	60	10.6

Table 6.Distribution of Respondents According to Amount (Grams) of Feeds Given per Bird/Day

							Pro	Province						
Amount of Feeds	౮	Capiz	Ž	Negros	Gui	Guimaras	An	Antique	П	Hoilo	A	Aklan	T	Total
	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Pullets														
No answer		8.69		56.2	26	59.1		35.0	1	1.4	37	40.6	235	42.1
50 grams and below		0.0		8.9	6	20.5		34.4	46	62.2	50	55.0	172	30.8
More than 50 grams	29	30.2	27	37.0	6	20.5	55	30.6	27	27 36.4	4	4.4	151	27.1
Mean	=	4.8		99.4	, -	74.7	_	2.3	7	3.1	4	5.8	7	71.1
Cockerels														
No answer	29	8.69		56.2		59.1		35.0	_		38	41.8	236	42.3
60 grams and below	0	0.0	5	8.9	6	20.5	63	35.0	51		52	57.1	180	32.3
More than 60 grams	29	30.2		37.0		20.5		30.0	22		1	1.1	142	25.4
Mean	10	9.3		8.86	*	80.3	_	8.4	7	72.6	41.7	1.7	7	.03
Hens														
No answer	2	2.1		8.2		18.2		35.6	-		36	39.6	117	20.9
50 grams and below	4	4.2		37.0		40.9		33.3	53		53	58.2	215	38.5
More than 60 grams	06	93.7	40	54.8	18	40.9	99	31.1	20	27.0	-	1 1.1	226	40.5
Mean	13	2.3		30.3		8.98		9.8	S		4	6.2	œ	1.1
Roosters														
No answer	2	2.1	7	9.6		18.2		36.1	1		36	39.6		21.3
125 grams and below	43	44.8	63	86.3	28	9.89	113	62.8	89	68 91.9	54	59.3	369	66.1
More than 125 grams	51	53.1	3	4.2		18.2		1.2	5		-	1.1		12.5
Mean	13	2.3		75.1	•	36.1	7	2.9	4	5.1	4	6.4		9.1
Total	96	100	73	100	44	100	180	100	74	100	91	100	258	100
								8						

For cockerels, most of the raisers (32.3%) provided 60 grams of feeds and below per bird per day with a mean of 71.03 grams/bird/day. The raisers in Capiz supplied the highest mean amount of 109.3 grams while those in Aklan still supplied the lowest (41.7 grams). For the hens, most of the raisers (38.5%) allocated 60 grams of feeds or below per bird per day. Their mean amount given to hens was 81.1 grams per bird per day. As with cockerels, the same trend was observed with hens raisers from Capiz providing the highest amount of feeds (132.3 grams) and those from Aklan, the lowest (46.2 grams).

For roosters, most of the raisers (66.1%) provided 125 grams of feeds and below/bird/day. Their mean amount of feeds given to roosters was 79.1 grams/bird/day with Capiz raisers providing the highest (132.3 grams) and those in Iloilo, the lowest (45.1 grams).

As can be gleaned from Table 7, almost half (46.8%) of the raisers spent Php 300.00 or lower for feeds. The mean estimated expenditure was Php 491.9 per month. Purchases of Php300/month or less for feeds were common among the majority of the respondents except for those in Iloilo, where most (43.2%) spent Php 301.00 to Php 600.00 per month. Based on mean expenses per month, the raisers in Aklan reported the lowest (Php 296.4) while those in Guimaras reported the highest (PhP 830.00).

Mortality, causes and control practices. Higher incidence of mortality among native chickens was observed by the respondents to start in March (24.7%), peaked in June (43.5%) and dwindled towards August (21.0%). This trend was quite similar among all provinces except in Aklan. In Aklan, this started in November (35.2%), peaked in December (44.0%), and declined in March (42.9%) of the next year (Table 8).

The native chicken raisers largely attributed this mortality to change of climate (83.5%), diseases (60.9%) and pests (29.6%). This observation was generally true to all provinces (Table 9).

Pests commonly observed by the raisers included avian pest (34.5%) and rats (38.8%) while the most common diseases included cold/flu (27.4%), respiratory diseases (19.7%), pneumonia (17.6%), and New Castle Disease (15.3%).

Across provinces, the majority (66.0% to 66.7%) of the raisers in Negros Occidental, Guimaras and Aklan did not provide any answer for specific pests of their native chicken. Avian pest was most common in Capiz (50.0%), Guimaras (33.3%) and Antique (82.4%) while rats were predominant in Iloilo (90.0%), Negros Occidental (33.3%), and Aklan (28.3%). For diseases,

respiratory diseases (44.9%) and avian influenza (44.9%) were most common in Capiz, New Castle Disease (16.7%) and Coryza (16.7%) were most common in Negros Occidental and cold/flu was mostly reported in Guimaras (67.9%) and Aklan (41.5%). In Antique, the most common disease was pneumonia (39.0%) while respiratory diseases was most common in Iloilo (55.3%) (Table 9).

Table 7. Distribution of Respondents According to Estimated Monthly Expenses in Feeds

Estimated Monthly						Pro	Province						$T_6$	Total
Expenses in Feeds	S	Capiz	Ne	Negros	Guin	Guimaras	Anti	Antique	Ĕ	Iloilo	A	Aklan		
	£	%	J	%	f	%	ţ.	%	f	%	f	%	f	%
No answer	-	1.0	3	4.1	Ξ	25.0	43	23.9	2	2.7	2	2.2	62	11.1
Php300 and below	51	53.1	40	54.8	13	29.5	75	41.7	13	17.6	69	75.8	261	46.8
Php301-600	24	25.0	24	32.9	7	16.0	42	23.3	32	43.2	14	15.4	143	25.6
Php601-900	6	9.4	4	5.5	5	11.4	13	7.2	10	13.5	2	2.2	43	7.7
Php900-1200	3	3.1	2	2.7	4	9.1	2	1.1	7	9.5	3	3.3	21	3.8
Php1201-1500	3	3.1	0	0.0	7	4.5	-	9.0	4	5.4	0	0.0	10	1.8
Above Php1500	2	5.2	0	0.0	2	4.5	4	2.2	9	8.1	_	1.1	18	3.2
Total	96	100	73	100	44	100	180	100	74	100	91	100	558	100
Mean	ir	5335	3	72.7	×	830	43	439.8	73	5.8	25	9.4	49	1.9

Table 8. Distribution of Respondents According to Months They Have Observed Higher Mortality Among Native Chickens (Multiple Response, N=558)

Months of Mortality							Prov	ince						
Among Native		apiz	Neg	ğr08	Guin	maras	Ant	Antique	Ιľ	lloilo	Ak	Aklan	$T_0$	Total
Chickens	f	%	J	%	f	%	f	%	f	%	J	%	J	%
January	-	1.0	4	5.5	3	8.9	10	5.6	3	4.1	12	13.2	33	5.9
February	0	0.0	10	13.7	3	8.9	16	8.9	7	2.7	14	15.4	45	8.1
March	10	10.4	18	24.7	33	8.9	55	30.6	13	17.6	39	42.9	138	24.7
April	17	17.7	13	17.8	<b>r</b> ~	15.9	115	63.9	32	43.2	∞	8.8	192	34.4
May	28	29.2	20	27.4	10	22.7	117	65.0	47	63.5	_	7.7	229	41.0
June	57	59.4	21	28.8	20	45.5	95	52.8	40	54.1	10	11.0	243	43.5
July	35	36.5	22	30.1	20	45.5	89	37.8	28	37.8	6	6.6	182	32.6
August	1	11.5	16	21.9	6	20.5	53	29.4	20	27.0	~	8.8	117	21.0
September	∞	8.3	4	5.5	7	4.5	21	11.7	4	5.4	~	8.8	47	8.4
October	7	7.3	_	1.4	0	0.0	∞	4.4	7	2.7	6	6.6	27	4.8
November	9	6.2	0	0.0	0	0.0	7	Ξ:	7	2.7	32	35.2	45	7.5
December	-	1.0	$\Box$	15.1	4	9.1	9	3.3	4	5.4	40	4.0	99	11.8

Table 9. Distribution of Respondents According to their Reasons for High Mortality of Native Chicken and Specific Pests and Diseases of Native Chicken (Multiple Response, N=558)

Reasons for High							Pro	Province						
Mortality of Native	CS	Capiz	Ne	Negros	Gui	Guimaras	Ant	Antique	][ ]	Iloilo	Ak	Aklan	$T_0$	Total
Chicken	f	%	f	%	ţ.	%	f	%	f	%	f	%	f	%
Change of climate	88	91.7	63	86.3	40	6.06	117	65.0	71	95.9	87	92.6	466	83.5
Disease	49	51.0	18	24.7	28	63.6	154	85.6	38	51.4	53	58.2	340	6.09
Pest	52	54.2	3	4.1	3	8.9	34	18.9	20	27.0	53	58.2	165	29.6
Others	35	36.5	16	21.9	_	2.3	7	3.9	6	12.2	11	12.1	79	14.2
Pest (n)	(52)		(3)		3		(34)		(70)		(53)		(165)	
Avian pest	26	50.0	0	0.0	_	33.3	28	82.4	0	0.0	7	3.8	57	34.5
Rats	25	48.1	-	33.3	0	0.0	5	14.7	18	0.06	15	28.3	2	38.8
Snakes	0	0.0	0	0.0	0	0.0	0	0.0	7	10.0	_	1.9	3	1.8
No answer	-	1.9	7	2.99	7	66.7	-	2.9	0	0.0	35	0.99	41	24.8
Diseases (n)	(49)		(18)		(58)		(154)		(38)		(53)		(340)	
Respiratory diseases	22	44.9	-	5.6	3	10.7	0	0.0	21	55.3	20	37.7	29	19.7
Avian Influenza	22	44.9	0	0.0	0	0.0	9	3.9	4	10.5	1	1.9	33	6.7
New castle diseases (aratay)	21	42.9	3	16.7	10	35.7	4	5.6	0	0.0	14	26.4	52	15.3
Cold/flu	0	0.0	7	11.1	19	6.79	47	30.5	3	7.9	22	41.5	93	27.4
Coryza	0	0.0	3	16.7	4	14.3	18	11.7	7	5.3	0	0.0	27	7.9
Fowl fox	0	0.0	7	11.1	7	7.1	6	5.8	9	15.8	0	0.0	19	5.6
Pneumonia	0	0.0	0	0.0	0	0.0	09	39.0	0	0.0	0	0.0	99	17.6
Kalunggo	0	0.0	0	0.0	0	0.0	0	0.0	5	13.2	7	3.8	7	2.1
No answer	0	0.0	7	38.9	0	0.0	10	6.5	0	0.0	0	0.0	17	5.0

Even with these observed pests and diseases, only 12.7% of the raisers claimed that they vaccinated their native chickens while the majority (86.4%) did not vaccinate (Table 10). The practice of vaccination was highest in Aklan (23.1%), followed by those in Negros Occidental (17.8%), Iloilo (10.8%), Antique (9.4%), Guimaras (9.1%) and Capiz (8.3%).

Most of those who vaccinated (46.5%) used New castle disease vaccine, followed by La Sota (23.9%), avian vaccine (14.1%) and pox vaccine (9.9%). Use of New castle disease vaccine was mostly done in Guimaras (100.0%), Negros Occidental (84.6%) and Aklan (61.9%). Use of La Sota was most common in Iloilo (75.0%) and Antique (64.7%) while Avian vaccine was widespread in Capiz (75.0%) (Table 10).

These vaccines were generally intended by the raisers to prevent avian influenza (43.7%) particularly in Iloilo (62.5%), Antique, (58.8%) and Aklan (57.1%) and new castle disease (31.0%) particularly in Negros Occidental (92.3%) and Capiz (62.5%).

Aside from vaccination, the raisers also provided their native chickens with substances for disease prevention and control. Most of them (30.5%) used Vetracin, anti-biotics, (18.6%) and other veterinary drugs (24.0%). Aside from these synthetic materials, only very few raisers used indigenous materials like warm rice, vinegar, *oregano*, *artamesa*, *and manunggal* (Table 11).

Across provinces, the use of Vetracin was most common in Guimaras (56.8%), Iloilo (36.5%), Negros Occidental (32.9%), and Aklan (22.0%) while the use of anti-biotics was mostly done in Antique (38.9%) and Capiz (30.2%).

These materials were given to native chickens by the growers to control mostly cold/flu (50.2%), respiratory diseases (19.6%), pneumonia (13.9%), coryza (8.1%), fowl fox (6.9%) and new castle disease (6.7%).

Except for the province of Capiz where the majority of the raisers used substances to control respiratory diseases (66.1%), these substances were generally used to control cold/flu in other provinces (Table 11).

#### Product Sold

The raisers were more likely to sell more pullets and cockerels than hens or roosters. Most of the respondents (46.4%) were selling five heads of pullets or lower per month. The mean number of heads of pullets sold per month was 5.6. Guimaras had the highest (13.1) followed by Iloilo while

Table 10. Distribution of Respondents According to Vaccination of Native Chicken against Poultry Disease (N=558)

v accinate inative Cnicken against Poultry Disease							1011	1 I Ovinice						
against rounty Disease	Ca	Capiz	Neg	Negros	Guir	Guimaras	Antique	dne	ΙΙ	Iloilo	Ak	Aklan	To	Total
	J	%	J	%	J	%	f	%	J	%	J	%	J	%
No answer	0	0.0	0	0.0	0	0.0	0	0.0	5	8.9	0	0.0	5	6.0
	~	8.3	13	17.8	4	9.1	17	9.4	∞	10.8	21	23.1	71	12.7
	88	91.7	09	82.2	40	6.06	163	9.06	61	82.4	70	6.9/	482	86.4
Total	96	100	73	100	44	100	180	100	74	100	91	100	558	100
Vaccines Commonly Used														
No answer	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	23.8	5	7.0
Avian vaccine	9	75.0	_	7.7	0	0	1	5.9	0	0.0	7	9.5	10	14.1
Pox vaccine	2	25.0	1	7.7	0	0	С	17.6	1	12.5	0	0.0	7	6.6
New Castle vaccine	_	12.5	Ξ	84.6	4	100.0	2	11.8	7	25.0	13	61.9	33	46.5
La Sota	0	0.0	0	0.0	0	0.0	11	64.7	9	75.0	0	0.0	17	23.9
Immunization	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	_	4.8	П	4.
Target Diseases of the Vaccines														
No answer	0	0.0	_	7.7	7	50.0	7	11.8	_	12.5	9	28.6	12	16.9
New castle Disease	2	62.5	12	92.3	_	25.0	7	11.8	7	25.0	0	0.0	22	31.0
Avian Influenza	3	37.5	0	0.0	-	25.0	10	58.8	2	62.5	12	57.1	31	43.7
Cold/flu	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	n	14.3	3	4.2
Coryza	0	0.0	0	0.0	0	0.0	3	17.6	0	0.0	0	0.0	3	4.2

Table 11. Distribution of Respondents According to Substances Usually Given to their Native Chicken and their Target Diseases (Multiple Response, N=558)

Cubatonoo Honoller Caron							Pro	Province						
Substance Usually Given	C	Capiz	Ne	Negros	Gui	Guimaras	Ant	Antique	П	Iloilo	A	Aklan	T	Total
to their rative Cilichell	f	%	J	%	J	%	J	%	J	%	f	%	f	%
Vetracin	17	17.7	24	32.9	25	56.8	57	31.7	27	36.5	20	22.0	170	30.5
Anti-biotics	29	30.2	-	1.4	-	2.3	70	38.9	33	4.1	0	0.0	104	18.6
Other veterinary drugs	6	9.3	17	23.3	9	13.6	<i>L</i> 9	37.2	56	35.1	6	6.6	134	24.0
Indigenous materials	4	4.2	9	8.2	0	0.0	_	9.0	6	12.3	9	9.9	26	4.7
No answer	37	38.5	25	34.2	12	27.3	0	0.0	10	13.5	99	61.5	140	25.1
Targeted Diseases														
Cold/Flu	-	1.7	29	60.4	21	9.59	66	55.0	37	57.8	23	65.7	210	50.2
Respiratory di sease	39	66.1	17	35.4	8	25.0	0	0.0	16	25.0	2	5.7	82	19.6
Pneumonia	0	0.0	0	0.0	0	0.0	58	32.2	0	0.0	0	0.0	58	13.9
Coryza	0	0.0	S	10.4	3	9.4	23	12.8	3	4.7	0	0.0	34	8.1
New Castle Disease	11	18.6	15	31.3	0	0.0	0	0.0	7	3.1	0	0.0	28	6.7
Fowl fox	0	0.0	16	33.3	П	3.1	4	2.2	4	6.3	4	11.4	29	6.9
Avian Influenza	0	0.0	0	0.0	0	0.0	~	4.4	_	1.6	_	2.9	10	2.4
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	7	3.1	0	0.0	7	0.5
Coccidiosis	0	0.0	0	0.0	0	0.0	_	9.0	0	0.0	0	0.0	_	0.2
No answer	8	13.6	0	0.0	0	0.0	0	0.0	0	0.0	5	14.3	13	3.1

Patubas

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Aklan had the lowest (3.1). About the same proportion of the growers (43.4%) sold five heads of cockerels or lower. They sold an average of 6.4 cockerels per month. Guimaras had the highest (19.3) mean number of cockerels sold per month followed by those in Iloilo (8.2) with Aklan having the lowest (4.2).

The respondents also sold hens and roosters but at a relatively lower quantity than pullets and cockerels. The majority (65.4%) of the growers did not sell their hens or provided no answer. This was particularly true in Aklan (90.1%), Antique (89.4%), Guimaras (75.0%) and Iloilo (55.4%). Less than a quarter (22.7%) of the growers had sold 1 to 2 heads of hens. The respondents sold an average of 3.4 heads of hens per month. More or less the same pattern was observed on the sale of roosters.

Only six raisers had sold their chicks while three had sold 5 and the other three had sold 10, or an average of 7.5 chicks per month. Of the six, three were from Capiz and the other three were from Aklan (Table 12).

# Factors Affecting Sale of Native Chicken

The results also revealed that more than one-fourth (26.7%) of the raisers believed that one of the major factors affecting the volume of native chicken they sold was the supply and demand of native chicken. Other factors identified by most respondents were financial needs for production of native chicken (19.5%), climatic factors (16.7%), price of native chicken (13.6%), and occurrence of pests and diseases (9.9%).

Across provinces, supply and demand of native chicken was the major factor in Iloilo (45.9%) and Aklan (63.7%) while the financial need for native chicken production was mostly identified in Negros Occidental (58.9%) and Capiz (22.9%). Climatic factors were mostly considered in Guimaras (40.9%) and Antique (22.2%) (Table 13).

Problems encountered. As shown in Table 13, the majority (65.0 %) of the raisers identified diseases as the main problem which is true to all of the provinces in the region. Change of climate and pests were also identified by a little over one-fifth (20.6% and 20.4%, respectively) of the growers. Some of them also reported that their problem was lack of fund to buy expensive feeds (17.0%).

Expansion plan. The majority (83.9 %) of the growers have plans for expansion (Table 14). The proportion of growers who planned to expand was highest in Aklan (98.9%), followed by those in Negros Occidental (91.8%) and Capiz (89.6%). The lowest proportion was in Iloilo (68.9%).

Table 12. Distribution of Respondents According to Volume (no. Of heads) of Native Chicken Sold per Month (N=558)

							Province	ıce						
Volume (no. of heads) Sold	Ö	Capiz	Neg	Negros	Guimaras	ıaras	Ant	Antique	II	Iloilo	Ak	Aklan	T	Total
	J	%	J	%	J	%	J	%	J	%	J	%	J	%
Pullets														
No Answer	18	18.8	18	24.7	14	31.8	120	2.99	13	17.6	15	16.5	198	35.5
5 heads and below	99	58.3	42	57.5	4	9.1	54	30.0	32	43.2	71	78.0	259	46.4
6-10 heads	17	17.7	13	17.8	13	29.5	5	2.8	16	21.6	5	5.5	69	12.4
More than 10 heads	2	5.2	0	0.0	13	29.5	-	9.0	13	17.6	0	0.0	32	5.7
Mean	4,	5.0	4	4.	13	1.	33	4	<b>∞</b>	6.	e	7		9.6
Cockerels														
No Answer	15	15.6	10	13.7	14	31.8	118	9:59	16	21.6	20	22.0	193	34.6
Below 5 heads	99	58.3	43	58.9	2	4.5	55	30.6	38	51.4	48	52.7	242	43.4
6-10 heads	18	18.8	20	27.4	6	20.5	4	2.2	10	13.5	21	23.1	82	14.7
More than 10 heads	7	7.3	0	0.0	19	43.2	3	1.7	10	13.5	2	2.2	41	7.3
Mean	4,	5.5	4	.7	19.	(1)		3.7	90	8.2	4	2	9	4.
Hens														
No Answer	11	11.5	37	50.7	33	75.0	161	89.4	41	55.4	82	90.1	365	65.4
1-2 heads	20	52.0	32	43.8	7	4.5	10	5.6	25	33.8	∞	8.8	127	22.7
3-4 heads	16	16.7	3	4.1	_	2.3	-	9.0	3	4.1	0	0.0	24	4.3
More than 4 heads	19	19.9	_	1.4	∞	18.1	00	4.5	5	8.9	П	1.1	42	7.5
Mean	7	1.1	1	1.8	6	3.3		4.9		3.3	_	œ	3	4.
Rooster														
No Answer	18	18.8	36	49.3	34	77.3	145	9.08	42	56.8	80	87.9	355	63.6
1-2 heads	44	45.8	29	39.7	7	4.5	20	11.1	25	33.8	9	9.9	126	22.6
3-4 heads	13	13.5	4	5.5	_	2.3	7	3.9	7	2.7	3	3.3	30	5.4
More than 4 heads	21	21.9	4	5.5	7	15.9	8	4.5	5	8.9	2	2.2	47	8.4
Mean		3.8	2	.3	4	5	3,	.2	2.	$\vdash$	2	.7	3	.3
Chicks														
No Answer	93	6.96	73	100	4	100	180	100	74	100	88	2.96	552	6.86
5 heads	7	2.1	0	0.0	0	0.0	0	0.0	0	0.0	_	1.1	3	0.5
10 heads	_	1.0	0	0.0	0	0.0	0	0.0	0	0.0	7	2.2	3	0.5
Total	96	100	73	100	4	100	180	100	74	100	91	100	558	100
Mean	•	6.7	_	0	_	_	_	_	_	0	∞	3	7	s.

Table 13. Distribution of Respondents According to Factors Affecting the Volume of Native Chicken Sold and Problems Encountered in Native Chicken Production (Multiple Response N=558)

							Province	nce						
Categories	Ç	Capiz	Ne	Negros	Gui	Guimaras	Ant	Antique	П	Iloilo	Ak	Aklan	$T_0$	Total
	J	%	f	%	H	%	f	%	f	%	f	%	f	%
Factors Affecting Sales														
No answer	31	32.3	0	0.0	0	0.0	47	26.1	0	0.0	0	0.0	78	14.0
Supply and demand of chicken	17	17.7	9	8.2	10	22.7	24	13.3	34	45.9	58	63.7	149	26.7
Financial needs for production of native chicken	22	22.9	43	58.9	0	0.0	27	15.0	∞	10.8	6	6.6	109	19.5
Climatic factors like heat and cold	3	3.1	=	15.1	18	40.9	40	22.2	15	20.3	9	9.9	93	16.7
Low price/unstable price	4	4.2	3	4.1	9	13.6	16	8.9	26	35.1	21	23.1	9/	13.6
Occurrence of disease/pest	19	19.8	7	9.6	6	20.5	10	5.6	5	8.9	5	5.5	55	6.6
High mortality rate	0	0.0	14	19.2	0	0.0	1	9.0	22	29.7	12	13.2	49	8.8
	0	0.0	0	0.0	_	2.3	12	6.7	0	0.0	7	7.7	20	3.6
Expensive price per kilo	0	0.0	0	0.0	0	0.0	0	0.0	7	2.7	14	15.4	16	2.9
Number of buyers	0	0.0	4	5.5	0	0.0	3	1.7	7	2.7	0	0.0	6	1.6
Problems Encountered														
Diseases/ Sickness	74	77.1	37	50.7	30	68.2	87	48.3	29	90.5	89	74.7	363	65.0
Change of climate	0	0.0	7	2.7	3	8.9	55	30.6	13	17.6	42	46.2	115	20.6
Pests	36	37.5	∞	11.0	5	11.4	38	21.1	10	13.5	17	18.7	114	20.4
Lack of capital to buy feeds	28	29.2	18	24.7	5	11.4	10	5.6	15	20.3	19	20.9	95	17.0
Stolen	0	0.0	0	0.0	0	0.0	0	0.0	13	17.6	25	27.5	38	8.9
High mortality rate	0	0.0	14	19.2	7	4.5	7	3.9	0	0.0	∞	8.8	31	9.6
Missing/accident of native chicken	0	0.0	9	8.2	7	4.5	Ξ	6.1	cc	4.1	00	8.8	30	5.4
Slow Growth	4	4.2	3	4.1	0	0.0	17	9.4	0	0.0	9	9.9	30	5.4
Confinement during planting & harvesting	0	0.0	0	0.0	0	0.0	56	14.4	_	1.4	0	0.0	27	4.8
Low Price	_	1.0	∞	11.0	_	2.3	9	3.33	2	8.9	7	2.2	23	4.1
Limited space of housing facilities	0	0.0	0	0.0	П	2.3	14	7.8	7	2.7	П	1.1	18	3.2
Flash floods	∞	8.3	0	0.0	0	0.0	5	2.8	_	1.4	_	1.1	15	2.7
Others	2	2.1	0	0.0	0	0.0	0	0.0	0	0.0	7	7.7	6	1.6

Table 14. Distribution of Respondents According to their Plans for Expansion (N=558)

							Prov	ince						
Plans for Expansion	C		Ne	gros	Gui	maras	Ant	ique	П	Hoilo	A	klan	To	tal
	f		f	%	f	%	f	%	f	%	f	%	f	%
Yes	98	9.68	29	67 91.8	34	34 77.3	140	77.8	51	689	06	6.86 0	468	468 83.9
No	10		9	8.2	10	22.7	40	22.2		31.1	-	1.1	06	16.1
Total	96		73	100	4	100	180	100		100	91	100	558	100
Hens														
10 heads and below	19	22.1	18	27.3	11	32.4	41	29.3	24	46.2	65	72.2		38.0
11-20 heads	31	36.0	23	34.8	9	17.6	63	45.0	10	19.2	13	14.4		31.2
21-30 heads	12	14.0	∞	12.1	7	5.9	15	10.7	12	23.1	2	2.2		10.9
31-40 heads	7	8.1	7	3.0	0	0	4	2.8	4	7.7	2	2.2	19	4.1
41-50 heads	16	18.6	11	16.7	4	11.8	12	9.8	0	0.0	2	2.2		9.6
51 and above heads	-	1.2	4	6.1	11	32.4	5	3.6	7	3.8	9	6.7		6.2
Total	98	100	99	100	34	100	140	100	52	100	06	100		100
Mean		9.5	2	7.4	w	7.2	7	3.9	2	8.0	1	5.4		1.
Roosters														
10 heads and below	98	100.0	63	95.4	26	76.5		88.6	24	46.2	9	72.2	388	82.9
11-20 heads	0	0	7	3.0	7	5.9		11.4	10	19.2	13	14.4	43	9.2
21 and above	0	0	-	1.5	9	17.6	0	0	18	34.6	12	13.3	37	7.9
Total	98	100.0	99	100.0	34	100.0		100.0	52	100.0	90	100.0	468	100
Mean		4.5	4,	5.2	1	3.8	9	4.	4,	5.2	4	9.4	S.	6

Of those who have expansion plans, the majority (69.2% and 82.9%) of the raisers said they will increase their breeders to not more than 20 heads of hens and not more than 10 heads of roosters, respectively. This is more or less true to all the provinces. Based on the mean number of heads of hens and roosters the respondents planned to expand, raisers in Guimaras had the highest mean number of hens (57.2 heads) and roosters (13.8 heads) while Aklan growers had the least mean number of hens (15.4 heads) and Capiz raisers had the least mean number of roosters (4.5 heads).

## Conclusions

Based on the above findings, the following conclusions are presented:

- 1. The native chicken raiser-respondents were mostly from Antique, above 30 years of age and elementary or high school educated. They were generally farmers by occupation receiving an average income of Php 4,155.80 per month.
- 2. From their native chicken production, the respondents earned an average of Php 1,002.50 per month with raisers from Guimaras earning the highest. On the average, income from native chicken can augment about a quarter of the respondents' income from their major occupation.
- 3. The respondents had been into native chicken production for an average of 17.5 years with an average of 16.2 heads of hens and 4.4 heads of roosters for breeding or an average of 1 rooster to 4 hens. The breeders were mostly upgraded and home grown native chicken followed by Darag and Jolo.
- 4. The native chicken growers generally raised their native chicken in free range. The usual feed stuffs given by the native chicken growers to their native chickens are more or less the same for pullets, cockerels, hens and roosters. Their most common feed stuff was corn/crack corn, followed by rice bran, home mixed ration, filled/unfilled palay and rice/milled rice. The native chicken growers feed their chickens by generally broadcasting on the ground.
- 5. Amount of feeds given to native chickens varied according to the growth stage of chickens. The mean amount of feeds for pullets was 71.1 grams per bird/day, 71.03 grams/bird/day for cockerels, 81.1 grams per bird per day for hens, and 79.1 grams/bird/day for roosters. The mean estimated expenditure for feeds was Php 491.90 per month.
- 6. Higher incidence of mortality among native chickens was observed by the respondents starting March, peaking in June and dwindling towards August. Mortality was largely attributed to climate change and prevalence of pests and diseases. The common pests included avian pest and rats while the most common diseases included cold/flu, respiratory diseases, pneumonia, and New Castle Disease.

- 7. Generally, the native chicken growers did not vaccinate their native chickens. Most of those who vaccinate were using New castle disease vaccine, followed by La Sota, avian vaccine and pox vaccine. These vaccines were generally intended by the raisers to prevent avian influenza, particularly in Iloilo.
- 8. The raisers also provided their native chickens with substances for disease prevention and control such as Vetracin, anti-biotics and other veterinary drugs. Aside from these synthetic materials, some of the growers used indigenous materials like warm rice, vinegar, oregano, artamesa, and manunggal. These materials were given to native chickens to control mostly cold/flu, respiratory diseases, pneumonia, coryza, fowl pox, and new castle disease.
- 9. The raisers were more likely to sell more pullets and cockerels than hens or roosters. The mean number of heads of pullets sold per month was 5.6, 6.4 heads of cockerels, 3.4 heads of hens and 7.5 chicks per month.
- 10. The raisers believed that the major factors affecting the volume of their native chicken sold was the supply and demand of native chicken, financial needs for production, climatic factors, price of native chicken, and occurrence of pests and diseases. The growers identified diseases as the main problem followed by climate change, pests, and lack of capital to buy high cost feeds.
- 11. The native chicken raisers have plans for expansion. The proportion of growers who planned to expand was highest in Aklan and lowest in Iloilo.

#### Recommendations

Based on the findings and conclusions of the study, the following are recommended:

- 1. The geographical areas where native chicken production abound may be used as basis for intervention. These areas can be the focal points for development assistance to increase production and improve marketing of native chicken in the region.
- 2. To improve their relatively low level of income, the respondents should consider raising more native chicken by at least doubling their present number of breeders.
- 3. Since the respondents are generally raising upgraded native chicken, proper disclosure of the product should be practiced to avoid product misrepresentation.
- 4. With higher incidence of mortality among native chickens from March to August largely due to climate change, diseases and pests, and a very limited proportion of the growers practice vaccination, it is recommended that preventive and curative measures like vaccination and other related mechanisms should be practiced by the raisers during this period to reduce or minimize mortality.

- 5. Efficacy of different indigenous materials in the prevention and control of pests and diseases among native chicken should be looked into as a means to reduce production cost and as a means to really produce organic native chicken.
- 6. There is a need to organize the native chicken raisers preferably on per area basis to pool their resources and create a product volume sufficient to directly sell to processors or consumers at a more competitive price.

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