Research Article

Carcass Characteristics and Pure Meat Production of Broiler Chickens in Traditional Markets on Lombok and Sumbawa Islands

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Abstract | Carcass characteristics and pure meat production of broiler chickens are indicators to assess carcass quality. This study was conducted to evaluate the carcass characteristics and production of pure meat broiler chicken circulating in the traditional markets of Lombok and Sumbawa based on the Indonesian National Standard. The material used was 191 heads of broiler chickens with a slaughter age of 45-49 days. Ninety heads from a chicken slaughterhouse in Mataram City, sixty heads from a chicken slaughterhouse in West Lombok Regency and forty-one heads from Sumbawa Regency. Determination of broiler chicken samples in each Regency was done by random sampling method. Research variables such as live weight, carcass weight and percentage, offal weight and percentage, edible offal weight and percentage, meat weight and percentage were analyzed using the Microsoft Excel program and regression correlation analysis. The results showed that carcasses with large size categories 77.67%, medium size 17.51% and small size 4.81%, while quality, which includes quality I, was 63.06%, quality II was 32.68%, and quality III was 4.26%. Broiler chicken pure meat products circulating in the traditional markets of Lombok and Sumbawa were respectively 54.21% and 57.83%. Conclusion: Carcass characteristics and pure meat production of broiler chickens circulating in traditional markets on the islands of Lombok and Sumbawa have met Indonesian National Standards i.e., broiler chickens had a live weight of 2.162.15 g, carcass weight of 1.582.38 g (72.94%), pure meat 1.202.04 g (55.43 %), offal 172.97 g (7.99 %), and edible offal of 140.84 (6.65%).

Keywords | Characteristics, Carcass, Pure meat, Traditional, Market

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INTRODUCTION

Broiler chicken is one of the most popular poultry as a meat producers to meet animal protein (Khotimah and Mayulu, 2018). The high and low selling value of broiler carcasses is very dependent on the weight of the carcass and the amount of meat produced (Suryanah and Anggraini, 2016). Chicken carcasses can be classified based on age and carcass weight (BSN, 2009). Furthermore, it was explained that based on the age of the chicken, carcasses were grouped into 3 age categories, namely: 1) < 6 weeks or young chickens (fryer/broiler), 2) 6-12 weeks or mature chickens (roaster), and 3) > 12 weeks or old chickens (stew). Based on carcass weight, it is divided into 3 (three) sizes, namely: 1) <1.0 kg or small size, 2) 1.0 kg-1.3 kg or medium size, and 3) >1.3 kg or large size.

Carcass characteristics and broiler meat production are influenced by several factors, namely genetic factors (Soeparno, 2015); feed quality (Suryanah and Anggraini,

2016), poultry handling before and after slaughter (Ulupi et al., 2018) and broiler slaughter methods (Bulkaini et al., 2019). The slaughter process that meets the standards will produce carcass and meat whose quality meets the provisions of the Indonesian National Standard (Amin and Nurhalizah, 2021). The stages in slaughtering poultry are: transporting, receiving, hanging poultry, stunning, removing blood, washing with boiling water, removing feathers, removing offal, processing organs, cooling, slaughtering, packaging, freezing, storage, and shipping (Daniel, 2011).

The transportation of poultry that is not handled professionally from the location of the breeder to the slaughterhouse can reduce the quality of the carcass and meat produced because the livestock is under high stress (Tamzil et al., 2022). Livestock with high stress causes muscle glycogen to undergo glycolysis enzymatically and produces lactic acid, which triggers changes in the pH of the meat so that the meat becomes pale, tender and watery. Changes in the pH of the meat in the carcass from an acidic environment (pH 5.1-5.8) to an alkaline environment (pH more than 6) caused the meat colour to turn pale and dark with low water holding capacity and high cooking loss (Bulkaini et al., 2020).

The low quality of carcasses is largely due to the traditional way of slaughtering chickens in chicken slaughterhouses (Subagyo et al., 2021). Handling or slaughtering that was still traditional will cause damage to the carcass in the form of bruises on the chest and thighs. It can reduce the profits of chicken slaughter entrepreneurs by 10-20% (Khotimah et al., 2018). The results of research by Abubakar (2003), slaughtering broiler chickens in a chicken slaughterhouse that uses a simple machine to clean feathers and does not apply a hazard analysis critical control point (HCCP) system produces carcass quality I of 51.85-66.55%, quality II (27.97-43.02%) and quality III (5.13-10.17%), while the cleaning of chicken feathers by hand resulted in carcass quality I of 50.75-58.91%, quality II of 32.63-40.45% and quality III of 7.76-11.25%. Furthermore, it was said that slaughtering chickens by inserting them into a funnel and cleaning the feathers by hand resulted in the best quality carcass percentage of 66.67%.

The quality of broiler carcass circulating in the Banyuwangi traditional market with the traditional slaughter method was found that the percentage of quality I broiler carcass quality was 60%, quality II was 30%, and quality III was 10% (Subagyo et al., 2021). The quality of meat circulating in the traditional market in Magelang, Yogyakarta district contains tetracycline residues ranging from 0.272-0.416 mg/kg, is not contaminated with bacteria, does not contain formaldehyde and the water content is classified as normal (Supriyanto et al., 2019).

Geographical location and completeness of chicken slaughterhouse equipment facilities affect carcass quality and pure meat production (BPS NTB, 2021; Supriyanto et al., 2019). Chicken slaughterhouses in West Nusa Tenggara, as a place for slaughtering poultry, have different facilities, resulting in varied carcass quality (Bulkaini et al., 2020). There are no specific research data related to carcass quality and broiler meat production circulating in traditional markets on the islands of Lombok and Sumbawa, so research is urgently needed.

Based on geographical position, West Nusa Tenggara Province has the following boundaries: To the north, it is bordered by the Java Sea and the Flores Sea; To the south, it is bordered by the Indian Ocean; the west is bordered by the Lombok Strait and the Province of Bali, and in the east, it is bordered by the Sape strait and the province of East Nusa Tenggara. West Nusa Tenggara consists of two islands, namely the island of Lombok and the island of Sumbawa, with very different climatic conditions. Lombok Island consists of: West Lombok Regency, Central Lombok, East Lombok, North Lombok, and Mataram City, while Sumbawa Island consists of: West Sumbawa Regency, Sumbawa, Dompu, Bima Regency, and Bima City (BPS NTB, 2021). As a tropical area, West Nusa Tenggara has a relatively high average humidity between 48-95%, with a maximum temperature of 30.9°–32.1°C (Hariarta and Setyawan, 2022).

Based on the description above, research was carried out to evaluate the carcass characteristics and production of broiler chicken meat circulating in the traditional markets of Lombok and Sumbawa based on Indonesian National Standard number 3924:2009.

MATERIALS AND METHODS

ETHICAL APPROVAL

The broiler chicken used in this study was approved by the Ethics Committee of the Faculty of Animal Husbandry, University of Mataram, Indonesia, with the Approval Number: 08/UN18.F2/EC/2021, April 5, 2021.The broiler chickens in this study were handled professionally; that is before slaughtering the broilers, they were transported using a 4-wheeled pick-up vehicle from the maintenance location to the chicken slaughterhouse and before slaughtering the broiler chickens, they were still given food and drink as needed. According to Islamic sharia rules in a chicken slaughterhouse, all broiler chickens are slaughtered to obtain pure carcass and meat by Indonesian National Standards.

Research material

The material used was 191 heads of broiler chickens with a slaughter age of 45-49 days. Ninety heads from a chicken slaughterhouse in Mataram City, sixty heads from a chicken slaughterhouse in West Lombok Regency and forty-one heads from Sumbawa Regency. Broiler chickens as research material get the same treatment in terms of the type of feed used i.e., broiler feed aged 0-10 days using BR 0 super F crumble concentrate; broiler chicken aged 11-20 days using BR 1 super crumble concentrate, and broilers aged 21 until harvest using BR II super pellet concentrate.

Research methods

Preparation of research samples

The broiler chickens used as research samples were sourced from the island of Lombok, namely Mataram City and West Lombok Regency, while the island of Sumbawa was taken from the Sumbawa Regency. Determination of the number of samples of broiler chickens in each regency was done by the random sampling method. Broiler chicken samples which amounted to 191 heads before being slaughtered, received the same treatment, namely: (1) Transportation of broiler chickens from the farmer to the slaughterhouse uses the same transportation, namely a four-wheeled pick-up vehicle; (2) Before slaughtering broiler chickens, fasted for 12 hours in the shelter; and (3) Slaughter is carried out using the Islamic sharia method.

Research sampling location

The location for taking broiler chickens as the research sample was set as follows: The Mataram City area was located in a poultry slaughterhouse (traditional market) Sweta-Baratais Sandubaya District, Kebun Rowek traditional market Ampenan District and Sindu traditional market Cakranegara District. West Lombok Regency was located in a poultry slaughterhouse (traditional market) Cengok Gunung-Sari District, Gunung Pengsong traditi-onal market Labuapi District, and Lembar traditional market Lembar District. The Sumbawa Regency area is located in the poultry slaughterhouse (traditional market) Brang Biji Sumbawa District, Utan traditional market Utan District, and Brangbara traditional market Sumbawa District.

Observation of research variables

Observations of research variables were carried out at the Animal Health Laboratory of each research location i.e., (1) The Mataram City area was carried out at the Laboratory of Animal Products Processing Technology, University of Mataram; (2) West Lombok region conducted at the Animal Health Laboratory of the West Lombok Agriculture and Livestock Service, and (3) The Sumbawa Regency area was carried out at the Animal Health Laboratory of the Livestock Service Office of Sumbawa Regency.

Research of variable

a. Weight of life: Live weight was obtained by weighing broilers after being fasted for 12 hours (Bulkaini et al., 2021).
b. Carcass weight: Carcass weight was obtained by subtracting live weight from the weight of the neck, head, feathers, shank (knees to fingers), and parts of the viscera except for the lungs (Bidura and Suasta, 2017).
c. Carcass percentage: Carcass percentage was obtained by dividing carcass weight by live weight multiplied by 100%.
d. Weight and percentage of offal: The weight of the offal was obtained by weighing the weight of the intestines, liver, heart, and gizzard after being cleaned of feces. The percentage of offal was obtained by dividing the total weight of offal divided by live weight and multiplied by 100%.
e. Weight and percentage of edible offal (foot, neck, and head): The edible offal weight was obtained by weighing each edible offal weight, while the percentage of offal was obtained by dividing the weight of offal by live weight and multiplied by 100%.
f. Pure meat weight: The weight of pure meat can be determined by weighing the weight of the meat in the chest muscles after being separated from the bones (Bulkaini, 2021).

Carcass weight and quality classification

The carcass weight obtained in the study was grouped into three, namely:1) Small carcass size (<1 kg); 2) Medium size carcass (>1.0-1.3 kg); and 3) Large carcass (>1.3 kg) (BSN, 2009). The grouping of carcass quality was divided into 3, namely quality I, quality II and quality III, with indicators as shown in Table 1.

Determination of carcass quality based on quality indicators (Table 1) involved 15 semi-trained panellists from the Faculty of Animal Husbandry, University of Mataram. Determination of carcass quality was carried out at the Animal Health Laboratory of each Regency, except for the Mataram City area, which was carried out at the Animal Product Processing Technology Laboratory, Faculty of Animal Husbandry, University of Mataram.

Analysis of data

The data from the research results at each location were arranged from the largest data to the smallest data for live weight parameters. In contrast, the other parameters followed the results of sort live weight parameters. Analysis of data such as live weight, carcass weight and percentage, weight and percentage of offal, weight and percentage of edible offal, weight and percentage of meat were analyzed using the Microsoft Excel program and regression correlation analysis (Steel and Torrie, 2015).

Table 1: Indicators for determining carcass quality.

Quality factor	Quality I	Quality II	Quality III
Condition of the meat	Thick	Moderate	Flimsy
Carcass fat content	Much	Much	Few
Condition of carcass	Intact	Whole bones, The skin of the chest carcass is still intact	Broken carcass bone, wing tip-off, The skin of the chest carcass is not intact
Condition of skin carcass	Free from damage to the skin	There is a little damage to the skin and not in the chest area	There is skin damage in the chest area
Hygiene condition	There are no fine hairs on all parts of the carcass skin surface	There are no fine hairs on the surface of the carcass skin in the chest area	There are fine hairs spread all over the surface of the carcass's skin

Source: (BSN, 2009).

Table 2: Average weight proportion of body parts of broiler chickens in West Nusa Tenggara (in g).

No.	Location of study	Number of samples	Life weight	Carcass	Pure meat	Offal	Edible offal*
1.	Mataram City	90	2.213.44	1.638.33	1.265.56	187.46	139.54
2.	West Lombok	60	2.085.33	1.483.08	1.074.83	131.27	145.62
3.	Sumbawa	41	2.161.95	1.604.88	1.248.78	202.20	136.71
Average			2.162.15	1.582.38	1.202.04	172.97	140.84
Maximum value			3.100.00	2.300.00	1.900.00	270.00	200.00
Minimum value			1.100.00	750.00	550.00	50.00	40.00
Deviation standard			424.43	345.29	276.97	44.02	25.66
Coefficient of variation (CV)			19.63	21.82	23.04	25.45	18.22

* Head, neck, and shank.

RESULTS AND DISCUSSION

WEIGHT PROPORTION OF BROILER CHICKEN BODY PARTS

The proportions of broiler chicken body weight, including live weight, carcass weight, pure meat weight, and offal and edible offal weight, are presented in Table 2.

The results (Table 2) show that the average live weight of broiler chickens in West Nusa Tenggara was 2.161.15 ± 424 g. The weight varies between research locations, with a maximum weight of 3.100 g and a minimum weight of 1.100 g. The variation was still within the normal range, as reflected by the Coefficient of Variation (CV) value of 19.63%. The live weight obtained in this study was almost the same as that of Sjofjan and Djunaidi (2016), namely, the average live weight of broiler chickens aged 35 days reached 2.016 g, and the results of Prasetyo et al. (2020) reached 2.047 g. In contrast, Liani et al. (2021) stated that broiler chickens with a harvest age of 30-35 days have a body-weight of around 1.500-2.000 g.

Sources of variation include broiler strain, age, sex, type of feed, maintenance management (cage density, presence or absence of access outside the cage) or natural conditions such as ambient temperature, humidity and air pressure. Fanatico et al. (2005) showed that age differences would produce different live weights. Ages of 48; 63; and 70 days will produce live weight: 2.210 g, 2.890 g, and 3.450 g, respectively. According to Yitbarek et al. (2016), male broilers at 49 days of harvest had a live weight of 2.315, while female broilers at the same age weighed 1.932 g.

Fanatico et al. (2005) once investigated the effect of access outside the cage on broilers' life. Broilers with large access to the outside of the cage will produce a higher live weight than broilers with limited access or media access outside the cage. Broilers with access outside the cage had an average live weight of 2.458 g at the age of 53 days, while those with limited and medium access had an average live weight of 2,110 and 2.327 g at the age of 81 and 67 days, respectively. HS et al. (2019) also explained that intensive maintenance and free-range access affected broiler chickens' morphometrics and body weight. Prasetyo (2018) explained that broiler body weight is also influenced by the material and thickness of the cage.

Mebratie et al. (2017) explained that sex differences in broiler chickens produce different live weights. Differences in body weight due to sex differences are also related to the cecum microbiota and its metabolites (Cui et al., 2021). Male broiler chickens at the age of 42 days have a live weight of 2.142 g, while female broiler chickens of the same age have 2.022 g (Kryeziu et al., 2018). It was further explained that the density would sometimes also affect the live weight of broilers, namely cages with high (22 fish/

m2), medium (18 fish/m2) and low (14 fish/m2) density levels will produce an average live weight of each: 1.958 g, 2,149 g, and 2.139 g at the age of 42 days.

Broiler chicken body parts percentage

The percentages of broiler body parts, including the percentage of the carcass, the percentage of pure meat and skin, the percentage of offal, the percentage of edible offal and the percentage of other body parts, are presented in Table 3.

The results (Table 2) showed that the average carcass weight of broiler chickens was 1.582.38 ± 345 g. The maximum carcass weight obtained in this study was 2.300 g, and the minimum weight was 750 g, with a CV value of 21.82%. The average percentage of broiler carcasses obtained in this study (Table 3) was 72.94%, with a maximum percentage of 84.62% and a minimum percentage of 60%. Variations in weight and carcass percentage were caused by several factors, including broiler strain, age, sex, type of feed, maintenance management, or natural conditions such as ambient temperature, humidity and air pressure.

Research by Sjofjan and Djunaidi (2016) shows that differences in feed composition (especially protein content) will result in different weights and percentages of carcasses. Broiler chickens fed a protein content of 22.68, and 20.88% will produce a carcass percentage of 75% and 73% of live weight, respectively, at 5 weeks of slaughter. Carcass weight obtained in this study also closely correlates with live weight. This is evidenced by the very high value of the correlation coefficient and R^2, namely: 0.92 with the regression correlation equation y = 0.7799x – 103.95 (x=live weight; y=carcass weight) shown in Figure 1.

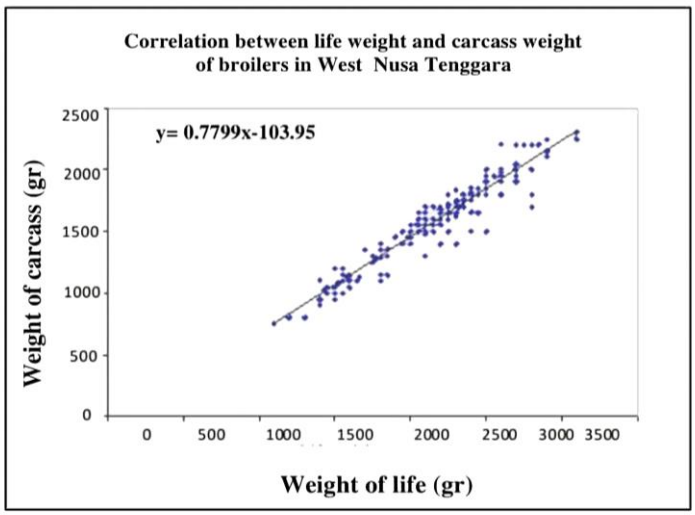

Figure 1: Correlation between live weight and carcass weight of broiler chickens.

With this regression correlation equation, it can be used to predict carcass weight if live weight is known.

Pure meat percentage

The study results (Table 3) show that the average weight of pure broiler chicken meat is 1.202.04 ± 277 g with a maximum value of 1.900 g and a minimum value of 550 g and a standard deviation of 276.97 and a CV of 23%. The average percentage of pure meat to live weight was 55.43%, and the maximum and minimum values were 69.23% and 34%, respectively, with the standard deviation of 5.58% and CV of 10.07%. Several factors, including cage density, influence the ratio of meat to the bone; as described by Suhita et al. (2019) that the cage density of 8 fish/m^2 resulted in a meat to bone ratio of 2.61 while rearing with a density of 20 fish/m^2 resulted in a ratio of 2.16.

This study proves that the weight of pure meat produced tends to be higher than the results of research by Sari et al. (2019) that a chicken with the age of 42 days has a pure meat weight of 730.33 g. It was further explained that the weight of pure meat was strongly influenced by the ability of livestock to absorb nutrients, especially the protein content of the feed. Pure meat and skin also have a very close relationship (correlation) with carcass weight; this is evidenced by the very high value of the correlation coefficient and R^2, namely: 0.90, as shown in Figure 2 with the regression correlation equation: y=0.759x+1.0013 (x = weight of carcass; y = weight of pure meat). The regression correlation equation can predict pure meat weight based on carcass weight.

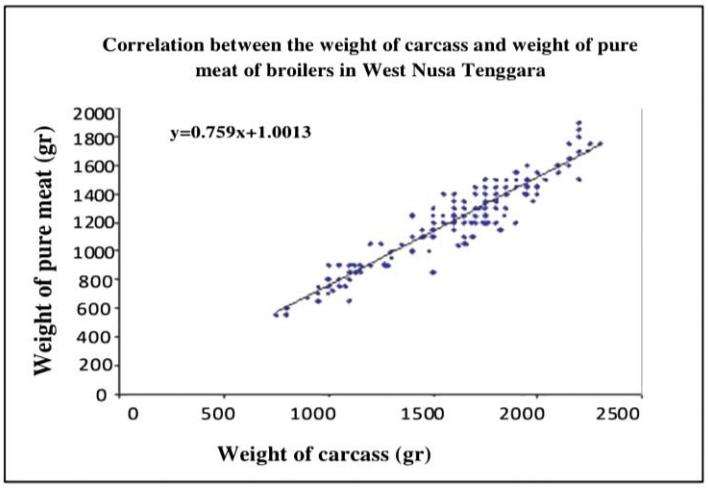

Figure 2: Graph of correlation between carcass weight and weight of broiler chickens meat in West Nusa Tenggara.

Offal percentage

The results (Table 3) show that the average weight of broiler innards is 172.97 ± 44 g, with maximum and minimum values of 270.00 g and 50.00 g, respectively, and 25% CV. The offal to live weight percentage was 8.08 ± 1.86%, with maximum and minimum values of 13.33% and 3.33%, respectively, and CV 23%. The results of this study

are in line with the results of Abdullah and Buchtova's (2016) study, which compared the weight of offal between organic and conventional broilers reared. The offal weight of organic broiler chickens aged 81 days was 188.16 g, while those reared conventionally at the age of 38 days of slaughter weighed 152.96 g of innards. The research results by Yitbarek et al. (2016) in Ethiopia reported lower yields than the average weight of broiler innards at 56 days of harvest of about 107.6 g. The research results of Indumathi et al.(2019) also showed that the weight of broiler innards at the age of 42 days was around 102.2 g. Kastalani et al. (2021) explained that the type of feed strongly influences the weight of offal. Feeds containing fibre tend to stimulate the work of organs such as the heart, gizzard, and liver to increase the weight of these organs. The weight of offal will also increase along with the high live weight of chickens. Yassin et al.(2020) explained that broiler chickens weighing 2.840 g have an offal weight of about 232 g.

THE PERCENTAGE OF EDIBLE OFFAL (HEAD, NECK, AND SHANK)

The study results (Table 3) showed that broiler chickens' average edible offal weight was 140.84 ± 25.66 g with a maximum and minimum value of 200.00 g and 40.00 g and CV 18.22%, respectively. Meanwhile, the average percentage of edible offal to live weight was 6.65±1.33%, with maximum and minimum percentages of 13.57% and 2.58%, respectively, and 20.03% CV. The results of this study were lower than those of Kidane et al. (2017), who stated that the weight of edible offal, such as the head, neck and claws of broiler chickens, at the harvest age of 49 days was around 167.9 g. Indumathi et al. (2019) examined broiler chickens at 49 days, which had a higher offal weight of 223.16 g. Yassin et al. (2020) reported that broiler chickens with a live weight of 2.840 g had an edible offal weight of 242.5 g.

PERCENTAGE OF OTHERS (FEATHERS AND BLOOD)

The results (Table 3) showed that the average percentage of the combined weight of feathers, blood and faeces calculated by the formula: [100 - (% carcass + % offal + % edible offal)] was 12.33±4.84%, with the maximum. Minimum scores were 29.29% and 4.76%, and CV 39.22%, respectively. The results of this study were in line with the research results of Indumathi et al. (2019), who reported that broiler chickens with a live weight of 1.930.8 g had blood and featherweight of 12.76%. Yassin et al. (2020) explained that broiler chickens with a live weight of 2.840 g have a feather and blood weight of 180 gr.

A general description of the proportions of the components that make up the body of broiler chickens in West Nusa Tenggara Province was presented in Figure 3.

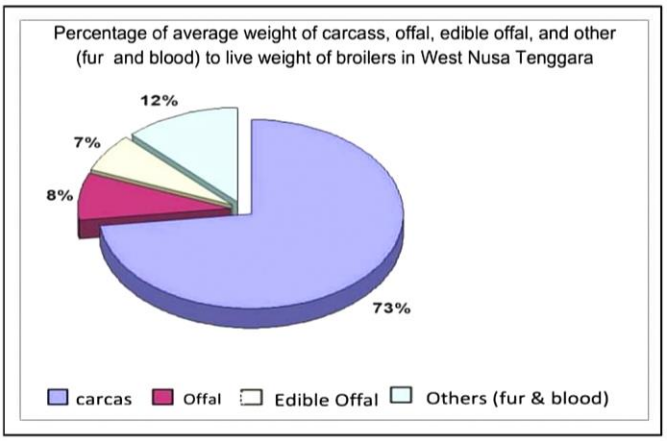

Figure 3: Graph the average percentage of carcass weight, offal weight, edible offal weight and other weights on live weights of broiler chickens in West Nusa Tenggara.

CARCASS WEIGHT AND QUALITY GROUP

Determination of the weight and carcass quality of broiler chickens circulating in traditional markets on the islands of Lombok and Sumbawa was guided by the provisions of SNI 3924:2009 (BSN, 2009).

The weight and carcass quality of broiler chickens circulating in the traditional markets of Lombok and Sumbawa are presented in Table 4.

Table 3: Average percentage of broiler body parts in West Nusa Tenggara (in %).

No.	Location of study	Number of samples	Carcass	Pure meat	offal	Edible offal*	Other**
1.	Mataram City	90	73.92	57.04	8.65	6.36	11.07
2.	West Lombok	60	70.76	51.37	6.31	7.25	15.68
3.	Sumbawa	41	73.98	57.83	9.43	6.37	10.22
Average			72.94	55.43	8.08	6.65	12.33
Maximum value			84.62	69.23	13.33	13.57	29.29
Minimum value			60.00	34.00	3.33	2.58	4.76
Deviation standard			4.70	5.58	1.86	1.33	4.84
Coefficient of Variation (CV)			6.44	10.07	23.05	20.03	39.22

*Head, neck, and shank; **feathers, blood and dirt.

Table 4: Broiler chicken carcass weight and quality (%).

Location of study	Number of samples	Carcass weight group			Carcass quality group		
		< 1 kg	>1-1,3 kg	> 1,3 kg	Quality I	Quality II	Quality III
Mataram City	90	4.44	11.11	84.45	73.34	22.22	4.44
West Lombok	60	10.00	31.67	58.33	50.00	41.67	8.33
Sumbawa	41	0.00	9.76	90.24	65.85	34.15	0.00
Total	191	14.44	52.54	233.02	189.19	98.04	12.78
Average		4.81	17.51	77.67	63.06	32.68	4.26
Deviation standard		5.01	12.28	17.00	11.92	9.81	4.17

The results of the study (Table 4) showed that the carcasses of broiler chickens circulating in the traditional markets of Lombok and Sumbawa in the large size category (weight above 1.3 kg) were 77.67±17.00%; the medium-size category (weight >1-1.3 kg) was 17.51±12.28% and the carcass with small size (weight<1 kg) was 4.81±5.01%. Carcasses circulating in the traditional market of Sumbawa Regency were large in the large size category (90.24%), larger than West Lombok Regency (58.33%) and Mataram City (84.45%). The difference in carcass weight was caused by live weight (Soeparno, 2015), reproductive organ weight (Bulkaini, 2021), and stress levels before slaughter (Tamzil et al., 2022).

Carcass quality circulating in traditional markets on the islands of Lombok and Sumbawa was found to be 63.06±11.92% in the first quality category, the second quality with 32.68±9.81% and the third quality with 4.26±4,17%. Carcasses circulating in the traditional market of Mataram City with quality category I (74.34%) were greater than those of West Lombok Regency (50.00%) and Sumbawa Besar Regency (65.85%). The difference in carcass quality was caused by the completeness of the feather removal facility (Subagyo et al., 2021) and errors during the slaughter of chickens or in the transportation process (Kartikasari et al., 2019); and stress levels before cutting (Tamzil et al., 2022). The main cause of the decline in the quality of broiler carcasses was unprofessional handling of slaughter, such as manual feather removal, which causes bruises on the carcass surface (Amin and Nurhalizah, 2021) and the presence of shoot hairs and spreads over the entire skin surface (Supriyanto et al. al., 2019).

CONCLUSIONS AND RECOMMENDATIONS

Carcass characteristics and pure meat production of broiler chickens circulating in traditional markets on the islands of Lombok and Sumbawa have met Indonesian National Standards i.e., broiler chickens had a live weight of 2.162.15 g, carcass weight of 1.582.38 g (72.94%), pure meat 1.202.04 g (55.43 %), offal 172.97 g (7.99 %), and edible offal of 140.84 (6.65%). Based on the conclusion of this study, it is suggested that in order to obtain carcass quality and broiler meat production in accordance with the Indonesian National Standard, broiler chickens should be slaughtered with a weight range above 1,300 g.Furthermore, the results of this study can be a consideration for the local government through the Department of Agriculture and Livestock in each Regency and City in determining the standard of broiler chicken slaughter weight that can produce carcass and pure meat in accordance with the Indonesian National Standard.

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NOVELTY STATEMENT

This research was conducted for the first time and found that carcass and meat circulating in traditional markets on the island of Lombok and Sumbawa were classified as meeting the Indonesian National Standards.

AUTHOR'S CONTRIBUTION

Bulkaini and Syamsuhaidi were fully responsible for conducting the research and writing the paper. Sukirno and Sukarne are in charge of processing research data, while Yusuf Sutaryono, Djoko Kisworo and Tapaul Rozi are in charge of editing the paper. Collectively revise the substance of the paper so that it is worthy of publication.

CONFLICT OF INTEREST

The authors have declared no conflict of interest.

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