Original Article
ISSN (Online): 2350-0530
ISSN (Print): 2394-3629

International Journal of Research - GRANTHAALAYAH
May 2024 12(5), 25–31

SOCIAL CHARACTERISTICS OF LIVESTOCK IN MEDIUM-SIZED TOWNS IN WESTERN CAMEROON

Djeugap Guédia Amélie Mermoze [1]

[1] Ph.D in Geography, University of Dschang, Cameroon

Received 29 March 2024
Accepted 01 May 2024
Published 31 May 2024

Corresponding Author

Djeugap Guédia Amélie Mermoze,
dgameliemermoze@yahoo.com

DOI
10.29121/granthaalayah.v12.i5.2024.5631

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

The present study highlights some social characteristics of livestock in Western Cameroon medium-sized towns. To carry it out, a questionnaire was given to 300 breeders, whose 100 in each of the towns of Dschang, Mbouda and Foumbot, three studied medium-sized towns in Western Cameroon. The choice of neighborhoods in these cities, as well as that of persons to be surveyed, was based on the intensity of livestock activities. The main results showed that male breeders are significantly more numerous (60%), married (76.70%) with 26.70% of households having a size between [5-6] members. The age of the breeders surveyed varied from 10 to 89 years, the most represented age group being 50 to 59 years (20.70%), and most of them (54.30%) have a secondary school level. 60% of these breeders have already had conflicts with their neighbors, the main cause of these conflicts being the olfactory and noise pollution of the animals raised, unsanitary conditions, and the destruction of gardens by animals. Urban livestock is a source of conflicts between breeders and neighbors in western Cameroon medium sized towns.

Keywords: Urban Livestock, Medium-Sized Towns, Social Characteristics, West Cameroon

1. INTRODUCTION

In the cities of developing countries and particularly in sub-Saharan Africa, the meat needs of populations are far from being satisfied FAO (2013). In Cameroon, the consumption of animal proteins remains very deficient, since only 11 g out of the 33 recommended by the World Health Organization are consumed per capita per day FAO (2013). These data reflect a deficit which continues to increase with rapid population growth and which accentuates malnutrition in Africa. In order to ensure food security, in parallel to the development of traditional meat production sectors,

those qualified as unconventional benefit from a little more attention, in rural, as well as peri-urban and urban areas.

Medium-sized towns seem the most conducive to livestock activities because of the apparent availability of space. This is the case for the towns of Dschang, Mbouda and Foumbot. In the city, there are breeders of different genders, religions, levels of study, marital status among others. The composition and performances of a livestock being also dependent on all these characteristics of breeders, the present work aims to study the social characteristics of livestock farmers in medium-sized towns of western Cameroon.

2. METHODOLOGY

The present study was carried out in three cities of Western Cameroon, notably Dschang (5°25-5°28 latitude North and 10°2 and 10°6 longitude East), Mbouda (5°36-5°39 latitude North and 10°14 and 10°17 East longitude) and Foumbot (5°28 -5°33 North latitude and 10°36 and 10°40 East longitude).

Qualitative and quantitative data was collected from March to April 2019 using surveys, reinforced by 27 in-depth interviews lasting between 30 minutes and 2 hours. The breeders described the different practices carried out, the occupants of the houses neighboring the farms or animals' lodges provided information on the effects of breeding on their relationships. Questionnaires were given to 300 breeders (100 per city) to collect informations about livestock and their actors. Three neighborhoods were chosen per town. The sampling of these neighborhoods was based on the intensity of livestock practices, their center-periphery location, their structure and their topography.

The processing of qualitative data was carried out through content Wanlin (2007) and thematic Braun & Clarcke (2006) analysis. As for the quantitative data, SPSS and Microsoft Excel software were used to process them and develop tables and graphs.

3. RESULTS

1) A numerically larger avian population in the medium-sized towns of western Cameroon

The composition of animal species bred in the studied medium-sized towns is presented in Table 1. It appears from that table that in Dschang, Mbouda and Foumbot, the species raised are very diversified. Thus, the livestock is made up of laying hens, broilers, ducks, geese, turkeys, guinea fowl, pigeons, sheep, goats, cows, rabbits and dogs. The numerical importance of each species in the herd varies greatly, both within and between considered medium-sized towns. On average, the percentage of poultry as compare to other species in these three cities is the highest, with laying hens and broilers dominating in descending order. The pig herd is the second largest after poultry, followed by rabbits, goats and dogs.

Table 1

Table 1 Composition (%) of Herd in Western Cameroon Towns

Animal	Dschang n=100	Mbouda n=100	Foumbot n=100	Average n=300
Poultry	97.30	95.61	99.09	98.35
Broiler	*22.48*	*53.95*	*14.43*	*22.67*

Laying hen	*70.86*	*34.85*	*84.20*	*73.26*
Local chickens	*2.89*	*2.85*	*0.44*	*1.33*
Duck	*0.61*	*1.80*	*0.15*	*0.52*
Geese	*0.07*	*0.759*	*0*	*0.14*
Turkey	*0.24*	*1.24*	*0.035*	*0.27*
Guinea fowl	*0*	*0.06*	*0*	*0.01*
Pigeon	*0.119*	*0.069*	*0.135*	*0.12*
Pig	1.82	2.20	0.58	0.89
Goat	0.17	0.40	0.14	0.19
Sheep	0.08	0.02	0.08	0.07
Dairy cow	0.00	0.00	0.06	0.04
Rabbit	0.39	1.55	0.03	0.36
Dog	0.24	0.22	0.02	0.10

n: sample size

Source Field survey (2019)

2) Urban breeders are men, married and mostly have reached secondary education

In the medium-sized towns of Western region of Cameroon, animal husbandry is practiced by actors without distinction of gender (Figure 1). However, male breeders are significantly ($p<0.05$) the most numerous independently of the city. The domination of the male gender is more pronounced in Foumbot than in Dschang and Mbouda.

Figure 1

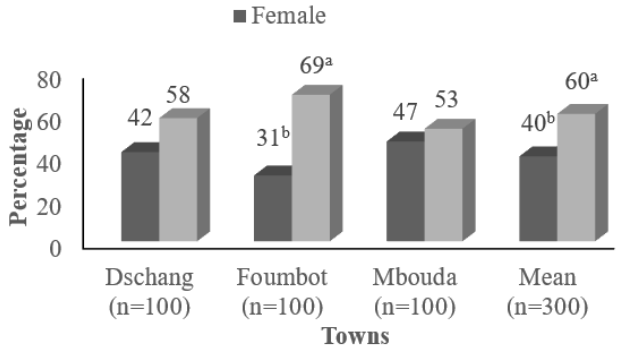

Figure 1 Distribution of Urban Breeders by Gender in Western Cameroon Towns

In addition to gender, the age of breeders was studied in medium-sized towns of western Cameroon, where it varied from 10 to 89 years (Table 2). For each of these cities, as well as for the three cities combined, the population of breeders increased with increasing age up to 59 years old before gradually decreasing from 60 years old.

When cities are considered (Table 2), in Dschang, age groups [30-39 years], [40-49 years], [50-59 years] and [60-69 years] include significantly ($p<0, 05$) more breeders than others. In Foumbot, breeders belonging to age groups [20-29 years],

[40-49 years] and [50-59 years] are the most numerous. In Mbouda, age groups during which breeding is most practiced are [20-29 years], [30-39 years] and [50-59 years].

Table 2

Table 2 Distribution of Breeders According to Age in Western Cameroon Towns

Age (year)	Dschang (n=100)	Foumbot (n=100)	Mbouda (n=100)	Average (n=300)
[10-19]	6.00^{b}	7.00^{de}	0.00	4.30^{c}
[20-29]	8.00^{b}	17.00^{ab}	17.00^{ab}	14.00^{b}
[30-39]	19.00^{a}	15.00^{bc}	25.00^{a}	19.70^{ab}
[40-49]	18.00^{a}	27.00^{a}	15.00^{b}	20.00^{ab}
[50-59]	19.00^{a}	22.00^{ab}	21.00^{ab}	20.70^{a}
[60-69]	22.00^{a}	9.00^{cd}	15.00^{b}	15.30^{ab}
[70-79]	7.00^{b}	2.00^{de}	6.00^{c}	5.00^{c}
[80-89]	1.00^{c}	1.00^{e}	1.00^{c}	1.00^{d}
Total	**100.00**	**100.00**	**100.00**	**100.00**
p.	**0.000**	**0.000**	**0.000**	**0.000**

a, b, c, d, e: on the same column, the percentages affected by the same letter do not differ significantly (p>0.05). n: number of breeders surveyed.

Source Field survey (2019)

It appears from Figure 2 showing the distribution of breeders according to their level of education that both independently of cities and when cities are considered, breeders with secondary education level are significantly (p<0.05) more numerous followed by those who stopped school in primary or higher education. Breeders who have not been to school are very poorly present in all towns.

Figure 2

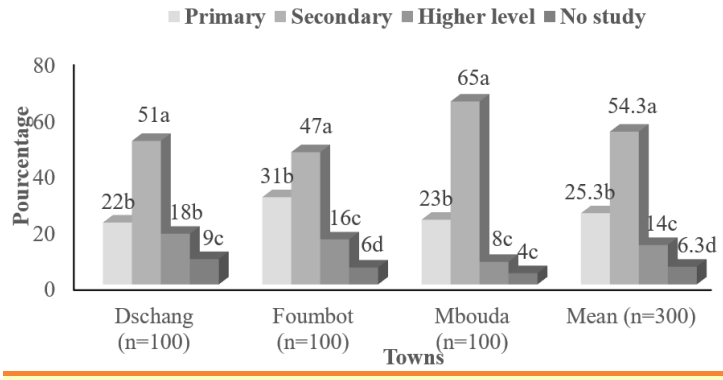

Figure 2 Distribution of Urban Breeders According to Educational Level

Source Field survey (2019)

The marital status of breeders in medium-sized towns is very varied. Regardless of cities, the rate of married, single, widowed and divorced breeders is 76.70%, 18.00%, 3.30% and 2.00% respectively. However, the married rate was significantly (p<0.05) the highest in all cities as compared to single's.

The household size of breeders varied from 1 to 28 members. Thus, 26.70% and 22.30% of households have between [5-6] and [7-8] members respectively.

3) Urban livestock farming, a source of conflicts with neighbors

For their livestock activities, 60% of breeders have already had conflicts with their neighbors because of noises and olfactory pollution, destruction of crops and overturning of soil on cultivated areas.

According to municipal archives, the main reasons for complaints from neighbors are odors (31.58%), stray animals (28.07%), unsanitary conditions (21.05%) and noises (19.30%).

4. DISCUSSION

Poultry, pork, small ruminants, rabbits, dogs and dairy cows are raised in the medium-sized towns that were the subject of this study. These species were already recognized by the FAO (1997) as being farmed in urban areas.

The dominance of poultry farming compared to species belonging to other classes could be explained by the short production cycle of reared birds (broilers), their easy diet (local chickens for example), a more great demand for poultry products by consumers (broilers and layers), and their small size which favors the easy installation of their breeding. Indeed, breeding birds does not require a lot of space. The preponderance of poultry in medium-sized western Cameroonian towns confirms the results of Cesaro & Apolloni (2019) in African cities, and those of Mfoukou-Ntsakala et al. (2006) in Brazzaville. Already in 2011, the Cameroonian Ministry in charge of livestock reported the preponderance of local chickens on a national scale, with a rate of 60% of the national domestic animal population. Unlike the medium-sized cities studied, in Sétif in Algeria, sheep dominated the livestock population with a rate of 85% Boudjenouia et al. (2006). In the Grenoble metropolitan area, out of 144 farms, half are made up of cattle and the rest of rabbits and snails Delfosse & Baysse-Laine (2018).

Livestock is practiced more by men than by women in medium-sized towns in western Cameroon. This result is reminiscent of that documented by Mopate-Logtene (2008) in the city of N'Djamena where pig breeders were made up of 73% men as well as that of Gomgnimbou et al. (2014) in Bobo Dioulasso with only 16% women. On the other hand, in Bafoussam II, urban livestock breeding is mainly an activity done by women (58.24%) Magne-Mouaffo (2017). These present results would be linked to the fact that women are the main actors in households, since they take care of the education, health and feeding of children on a daily basis. Consequently, unlike men, they are less available for all other activities, including breeding. In addition, the breeding of certain species such as pork, small and large ruminants requires more physical strength, therefore are more suitable for men.

A progressive increase in the number of breeders between 10 and 59 years old, followed by a decrease from 60 years old in studied cities were a predictable result. Indeed, at a young age, the needs of children are assumed by their parents, because the children are not yet financially independent. They gradually become so as they get older, and must therefore have their own activities including breeding, especially since from a certain age, they stop going to school. From the age of 60, the number of breeders begins to decline due to fatigue, especially if the species raised requires physical strength. Carrying out breeding at this age may only be possible with the help of a workforce, with the owner acting just as coordinator of works.

Breeders over 60 years old constitute a rate that is four times higher than that recorded in the town of Bafoussam II by Magne-Mouaffo (2017).

In the towns of Dschang, Mbouda and Foumbot, on average 93.7% of breeders have been to school. Among them, those with secondary education level were the most numerous. This same observation was made in Bafoussam II, where the majority of breeders are educated with those of secondary school level having represented 64.9% Magne-Mouaffo (2017). On the other hand, Mopate-Logtene (2008) noted that among 71% of pig breeders attending school in N'Djamena, the most represented level of study was that of primary school (41%). Higher-level breeders in medium-sized towns were double those observed in N'Djamena by the latter author. The low proportion of non-educated breeders and those with higher education could be explained firstly by their low proportion in the population. In fact, today in Cameroon, very few people are not educated. Likewise after the baccalaureate, only a small proportion of graduates continue studying at university

The fact that the majority of breeders are married could be explained by the age group at which most of the breeders are registered, which corresponds to the age of marriage among Cameroonian of the West region.

Livestock allows family needs to be covered, therefore food security. Indeed, 26% of the surveyed breeders are heads of households with 5 to 7 members.

Livestock is a source of conflicts between neighbors. Indeed, it is known that animals' farms are sources of odors, dirt, leachate, and noise which can be unbearable for many people. Wandering animals defecate at a neighbor's house, drink from their water... This same observation was made in the cities of Lyon and Grenoble where odors and effluents harmed residents in the immediate vicinity of animals' farm Delfosse & Baysse-Laine (2018). The same is true in Bobo Dioulasso, where olfactory and auditory nuisances were noted by the population Yaro (2013), as well as in European cities Delfosse et al. (2017) and in Maradi Ali et al. (2003).

Also, in the three studied cities, plant production areas are generally spaces around residential houses, therefore not far from animal housing. These areas are very often without barriers, and therefore very accessible to wandering animals which destroy crops by eating them (this is the case for all conventional livestock species) or by turning over the soil of cultivated areas (pig).

If some neighbors of breeders, although not happy, avoid conflicts, it is because they favor peaceful coexistence. The reaction, where applicable, of the neighbor who owns the crops or is the victim of odors, noise and/or dirt, can range from a simple warning to the killing of animals, using physical means or by poisoning among others. This results in sometimes tense relationships between all the members of the two families.

5. CONCLUSION

The present study showed that in West Cameroon, urban breeding activities are carried out by breeders who are mostly male, married and educated. Breeders belong to age groups between 10 and 89 years old, and the proportion of breeders in the population increased with age between 10 and 59 years old. Urban livestock is a source of conflicts between breeders and breeders' neighbors and the origin of conflicts are the wandering of animals, odors, noises, destruction of crops, as well as animal droppings.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

Ali, L., Van-den-Bossche, P., & Thys, E. (2003). Enjeux et Contraintes de l'Élevage Urbain et Périurbain Des Petits Ruminants à Maradi au Niger: quel avenir? Revue Elevage Vétérinaire Pays Tropicale, 56(1-2), 73-82.

Boudjenouia, A., Fleury A., & Tacherift, A. (2006). L'élevage périurbain de Sétif : une activité agricole très liée à la ville, new medit, 2, 16-19.

Braun, V., & Clarcke, V. (2006). Using Thematic Analysis in Psychology. Qualitative Research in Psychology, 3, 77-101

Cesaro, J.-D., & Apolloni, A. (2019). Élevage et urbanité, dans les villes développées ou en développement, quelles oppositions et Quelles Complémentarités? Territoire en Mouvement : Revue de Géographie et Aménagement [Online] Articles, Online Since 19 February 2020, Connection on 28 February 2020.

DSCE MINEPIA (2011). Document de Stratégie du sous-secteur de l'élevage des pêches et des industries animales, 123.

Delfosse, C., & Baysse-Laine, A. (2018). L'élevage en milieu urbain entre nature et nourriture: le cas des métropoles de Lyon et Grenoble, Géocarrefour, 92(3), 1-49, consulté 02 Mars 2020. https://doi.org/10.4000/geocarrefour.12239

Delfosse, C., Dumont, B., & Hostiou, N. (2017). Des Services Contrastés Rendus Par l'Élevage Dans Les Espaces Urbains et Périurbains Européens, INRA Production Animale, 30(4), 395-406.

FAO (1997). Des aliments pour la ville, Élevage urbain, sécurité alimentaire ou danger pour l'environnement ? Rome, 14.

FAO (2013). Le développement du secteur de l'élevage pour la réduction de la pauvreté : perspectives économique et politique - Les nombreuses vertus de l'élevage, Rome, 206.

Gomgnimbou, A. P., Nacro, H. B., Sanon, O. H., Sieza, I., Kiendrebeogo, T., Sedogo, M. P., & Martinez, J. (2014). La gestion des déjections animales dans la zone périurbaine de Bobo-Dioulasso (Burkina Faso) : structure des élevages, perception de leur impact environnemental et sanitaire, perspectives. Cahiers Agricultures, 23(6), 393–402 (1).

Magne-Mouaffo, C.-S. (2017). Elevage Urbain, Impacts Socioéconomiques et Environnementaux à Bafoussam II, Mémoire de Master, Université de Dschang, Dschang, 164.

Mfoukou-Ntsakala, A., Bitémo, M., Speybroeck, N., Van Huylenbroeck, G., & Thys, E. (2006). Agriculture Urbaine et de subsistance des ménages dans une zone de post conflit en Afrique centrale, Home, 10(3), 237-249.

Mopate-Logtene, Y. (2008). Dynamique des élevages porcins et amélioration en zones urbaines et périurbaine de Ndjamena (Tchad), Thèse de Doctorat unique, Université polytechnique de Bobo-Dioulasso, Bobo-Dioulasso, 246.

Wanlin, P. (2007). L'analyse de contenu comme une méthode d'analyse qualitative d'entretiens; une comparaison entre les traitements manuels et l'utilisation des logiciels, 243-272 consulté dans.