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Characterization of Pig Sector in the North of Côte d'Ivoire: Case of the Department of Korhogo

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Abstract

To understand the organization of the pig sector in the North of Côte d'Ivoire, a study was carried out in four sub-prefectures (Korhogo, Karakoro, Tioro and Napie). To do this, a survey was carried out using a questionnaire addressed to the various actors in the sector. The results showed that pig farming is practiced by men (66.66%) and more Christians (70%) practice it. Improved breeds (46.67%) are more exploited in these farms and the average herd size is 23± 4 heads, with a predominance of fattening pigs (24.91%). Most farms are traditional (50%). Food manufacturers are the least present in the sector. The feed mills were all located in Korhogo. They all produced and sold food and different raw materials. At the processor level, this study shows that pigs processors are mainly of Senoufo ethnicity (41.38%). Most processors are women (58.62%) divided into three main categories of processors: charcutiers-restaurateurs, charcutiers and restaurateurs. Most pork meat butchers and restaurants are located along the tracks (82.75%). In addition, pork consumers are mainly men (83.33%) and of the Senoufo ethnic group (36.46%). The main places of pork consumption reported are at the roadside (54.93%) and in restaurants (35.21%). Pig breeding is the prerogative of almost all sociolinguistic and socio-professional groups in the Korhogo department. Improvement strategies should focus on the organization, accountability and supervision of stakeholders for better management of production in the interest of the development of this breeding.

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Characteristics, sector, pig, actors, activities, Korhogo.

Introduction

In Ivory Coast, the pork industry occupies a strategic place in the Ivorian economy with regard to the issue of food security (FAO, 2020). Faced with the growing demand for meat, the Ivorian pork industry has intensified and modernized, in particular thanks to the efforts of the State. This evolution of the sector took shape mainly in the development of peri-urban livestock farms in Abidjan which concentrated around 90% of Ivorian pork production (MIRAH, 2006). In the north of the country, precisely in the Korhogo Department, people are starting to take an interest in pig farming. According to Diao (2004) the galloping demographics of cities lead to constantly growing urban demand and considerably influence the animal sectors.

All this implies structural changes in the functioning of the sector. Worse, no data exists to date on the pork industry in the region and most breeders are left to their own devices.

However, knowledge of the pig industry in the region would be a real lever for the implementation of a development strategy for pig farming in the region. This development, according to Djimenou *et al.,* (2021), would not be possible without an exploration of the characteristics, assets and constraints of the different links in the pork sector in the region.

Materials and Methods

During this study, the equipment used consisted of a survey sheet, a camera for taking pictures and a means of transportation (motorcycle or car). The target populations of the survey were breeders with at least two pigs, food manufacturers with mills and industrial companies, fresh meat resellers, processors and consumers.

The questionnaire addressed to pig breeders concerned the structure and operation of pig farms, through which information relating to the socio-economic status of the producer, the structure of breeding, infrastructure, breeding systems, l feeding, livestock management, health problems and exploitation of the herd (self-consumption and sale of animals). The one sent to the food production units made it possible to identify the establishment, to learn about its material and human resources, its activities, etc.

The one intended for pork merchants, delicatessens and restaurants made it possible, on the one hand, to identify the delicatessen or the trader through their socio-economic status and to become aware of their activities, in particular the origin and quantity of animals purchased, prices and terms of purchase, supply difficulties.

On the other hand, it made it possible to collect information relating to the number of animals sold, the selling prices of the live animal or the kilogram of pork, to customers, to the sales period, the terms of sale, the evolution of pork consumption, the difficulties encountered in marketing and their proposals for improvement. The one sent to the food production units made it possible to identify the establishment, to learn about its material and human resources, its activities, etc.

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On the other hand, it made it possible to collect information relating to the number of animals sold, the selling prices of the live animal or the kilogram of pork, to customers, to the sales period, the terms of sale, the evolution of pork consumption, the difficulties encountered in marketing and their proposals for improvement. As for the questionnaire intended for pork meat consumers, it initially made it possible to identify them, to assess their rate of consumption, their purchasing behavior, the quantity consumed, the price per kg of meat, the places purchasing, and the difficulties linked to the supply of meat.

Sampling

The investigation was carried out in the department of Korhogo, more precisely, in the sub-prefectures of Tioro, Napie, Karakoro and Korhogo. The choice of the four sub-prefectures among the 16 is justified by the fact that they are recognized as an important pork breeding area. The sampling method used is the empirical, non-probabilistic method in which individuals are retained when they are encountered until a satisfactory number is obtained. However, the likelihood of an individual being retained is not known.

Conduct of the investigation

Preparing for the survey

The preparation phase consisted of the development of five questionnaires intended for pig breeders, pig feed manufacturers, traders and butchers, authorities and agents involved in pig farming and pork consumers.

In the field it lasted around ten days and allowed the questionnaires to be tested in the Korhogo department. At the end of this phase, adjustments were made to the questionnaires.

Investigation technique

It took place over a period of approximately 4 weeks. It took the form of a direct observation visit to farms and interviews with the various stakeholders involved in the pig industry. Field trips were made by car and motorbike. The objective is to collect targeted information, structured according to a predetermined questionnaire. In some livestock farms or businesses or restaurants, the interview took place immediately on the first visit, while in others, it took place a few days later depending on the availability of the respondent.

Collecte des données

It took place over a period from February 4 to April 27, 2023, i.e. approximately 3 months at the rate of 3 weeks per sub-prefecture. It took the form of visits to pig farms followed by interviews with the various players in the sector. Thus, 30 livestock farms and 20 manufacturing stores were visited, including 3 industrial feed stores and 17 livestock mills. Also, 29 pork processors and 96 consumers were surveyed.

The data was obtained by having each actor complete the questionnaire developed if the respondent is literate and by a third person otherwise. In some farms, the interview takes place immediately upon the first visit, while in others, it takes place several days after submitting the questionnaire.

Traitement des données

The statistical processing of the data was carried out using computer tools, firstly using the “EXCEL” spreadsheet for entering data collected from the various players in the sector. Statistical analysis was carried out using the Statistical Package for the Social Sciences Personal Computer (SPSS/PC) software (SPSS, 2009). Thus, the means were compared to the 5% threshold with the Newman-Keul test.

Results and Discussion

Geographical distribution of the different actors

Table I shows the geographical distribution of the different players in the pork sector in the Korhogo Department. It appears that pig breeding is well practiced in all sub-prefectures except that those of Korhogo (26.67%) and Napié (36.67%) have more breeders. In the sub-prefecture of Karakoro, few breeders are established there (16.67%). Concerning charcuterie, it is well practiced in the four sub-prefectures. However, more than half of the processors are based in Korhogo (68.97%). That of Karakoro has the lowest presence of transformers (3.45%). The majority of consumers come from the sub-prefecture of Korhogo (67.71%) and that of Karakoro has the lowest rate of consumers (7.29%). In the four sub-prefectures visited, it should be noted that only two companies supply the feed (IVOGRAIN and KOUDJIS) and a minority of stores (20%), all located in Korhogo, market their feed. The majority (80%) are mills, 45% of which are represented in Korhogo (Table II).

Socio-demographic characteristics of the actors

The socio-demographic characteristics of the actors in the pork sector are presented in Table III. The breeders are all Ivorian with 93.33% Sénoufos. It appears that pig farming is practiced mainly by men (66.67%) and a minority (33.33%) by women with significance ($p \leq 0.05$). The breeders are mostly Christians (70%) whose dominant age group is between 40 and 50 years old (46.66%). Regarding marital status, most breeders were married (86.66%).

Regarding pig meat processors, the majority were Ivorians (96.55%) with 68.96% Sénoufos and 31.04% made up of Agnis, Baoulés, Peulhs and Mossis. Pork meat processing is significantly ($p < 0.01$) practiced by women (58.33%). Those whose age is between 40-50 years old were the majority (48.27%) followed by those whose age is between 30-40 years old (34.48%). The majority were married (55.17%) and 34.48% were living together.

As for the consumers, they were all nationals (100%) and the predominant ethnic group was the Sénoufo (36.46%). There were more men (83.33%) than women (16.67%). The most represented age group was 30-40 years old (52.08%). Married men were the most numerous (46.87%) compared to single men (27.08%) and those living together (26.04%).

Characteristics of activities

Characteristics of pig farms

The rate of illiterate breeders was 33.33% and that of those with no training in pig farming was 70%. Individual private farms were the most numerous (96.67%). Only 3.33% are in association (Table IV).

The improved breed is raised by 46.67% of farms while the local breed is present in 36.67% of farms. Many are supported by veterinary money for animal welfare with a percentage of 40%.

The breeding system was traditional (50%) or semi-intensive (43.33%). The type of pig farming was essentially mixed (farmer-fattener) with a rate of 96.66%. Breeding breeders represent only 3.33%. There is no fattening type breeding.

The average number per pig farm visited is 23 ± 4 animals. The minimum size is 02 pigs and the maximum size is 126 pigs. As for the overall composition, fattening pigs predominate (5.73 ± 0.93), then come pre-mother piglets (5.33 ± 0.91), followed by post-weaning piglets (4.73 ± 0.86) (Table V).

Supply of inputs and sale of animals

Supply of food, breeding equipment and sanitary products

Most breeders (66.67%) formulate their own feed, only 33.33% obtain their supplies from feed resellers. For food formulation, 66.67% purchased ingredients from resellers while 33.33% obtained their supplies from local feed mills.

Most breeders (50%) buy the equipment (feeders, drinkers, brooms, rakes and shovels) at the market and 30% make it themselves. The majority of breeders (60%) sometimes took sanitary products from veterinarians when their animals were sick. On the other hand, others voluntarily go to veterinary practices to purchase medicines (20%). Some got their supplies from medicine sellers along the roads (10%). The others (10%) did not undergo treatment (Table VI).

Method and price of sale of pigs

Concerning the sale of pigs (Table VII), the main place of sale of pigs remains the home (96.67%). The most common sales method is estimated sales or price haggling (66.67%).

Sale by live weight (33.33%) is mainly practiced in modern breeding of improved breeds. The average price of a young to adult pork butcher varies from 8,000 to 70,000 FCFA for local pork and from 15,000 to 120,000 FCFA for improved breed pork. For sale by live weight, the price varies from 1500 to 2000 FCFA per kg live (table VIII).

Characteristics of the activities of food manufacturers

All the food manufacturers visited produce and sell food. The production units obtain their supplies partly from local markets (50%) and villages (30%). Their various suppliers are national farmers (40%) and traders (50%).

Some manufacturers import certain products (20%) from the sub-region (Ghana for soybeans, Benin for cottonseed meal), France (wheat), Brazil (soybeans), Argentina (corn) and premixes.

However, the main places of supply remain local markets (50%). After manufacturing, the majority of manufacturers sell wholesale and retail (80%) (Table IX).

Characteristics of processor activities

Au niveau des activités des transformateurs la majorité (82,75%) pratique la restauration dans le département de Korhogo, 17,25 % vendent de la viande de porc fraîche. La plupart de leurs fournisseurs sont des revendeurs (62,06 %) et 37,93 % s'approvisionnaient dans les élevages. Par-contre 37,93 % s'approvisionnent sur le marché. La majorité de leurs clients sont les particuliers avec un pourcentage de 83,33 %.

Ensuite, la plupart des transformateurs vendent leurs produits en détails (87,50 %). Parmi les personnes enquêtées, seulement 10,34 % appartiennent à une association. Certains (44,82 %) n'arrivent pas à satisfaire leurs clients. Pour la méthode d'achat de la viande, 58,62% font leurs achats au poids vif et la majorité paye au comptant (65,51 %). De plus, 37,93 % gèrent leurs entreprises avec leurs familles (Tableau X).

Consumer activities

The majority of respondents (73.96%) appreciate and consume pork. In terms of products purchased by consumers, it appears that braised meat was the most appreciated by the consumers surveyed (i.e. 42.25%) followed by soup (35.21%).

The majority (54.93%) of consumers went to the roadside for their purchases. And most of their suppliers were roadside pork sellers (49.30%) (Table XI).

Organization and constraints

Organization of the sector

In the Korhogo department, only 16.67% of breeders are in an association. The five (5) associations listed are Awepkos (Woniemgnon Association of Pork Breeders Korhogo Sub-prefecture), Bemtinin, Federation of Pig Breeders in the region, AMK (Association of Migathiory of Karakoro and Gnebeyenon Group.

Constraints

Table XII summarizes the constraints of the different actors. In the absence of any possibility of access to sources of financing (credits), pig breeders only rely on their sole possibility of self-financing (100%). The high cost of feed or raw materials, frequent shortages and supply difficulties represent the major constraints facing pig farmers regardless of their size. However, 66.67% of breeders reported a high rate of inbreeding and 80% lacked professional training and technical monitoring.

Only the cost of raw materials for the manufacture of feed constituted the real constraint (80%). The lack of financial support from the State and the disorganization of marketing characterized by a lack of contractual relations and consultation between the different actors in the sector for charcutiers were the constraints reported by all the actors. All consumers (100%) complained about the high price of pork.

The socio-demographic characteristics of breeders in the department of Korhogo show that the ethnic group which most practices pig breeding was the Sénoufo (93.33%) and in a small proportion by other ethnic groups (6.67%). This study shows that pig farming is practiced by several ethnic groups. These results are consistent with those of Mopaté and Kaboré-Zoungrana (2010) carried out in N'Djamena where several ethnic groups were identified in the practice of pig breeding. This variation in ethnic groups indicates that pig farming is not the preserve of a single sociolinguistic group. However, the Sénoufos are largely dominant, certainly because they are omnipresent in the department and the importance of pork in their culture. Pig breeding is an activity mainly practiced by men in the Korhogo department (66.67%). The strong dominance of men is explained by the fact that most of the funding comes from them. These results are consistent with those obtained by Mopaté (2008) in N'Djamena (73%), Ndébi *et al.,* (2009) in Cameroon (85%) and Houndonougbo *et al.,* (2012) in Adjarra in the South-East of Benin (97%). However, our results disagree with those of Halimani *et al.,* (2012) in South Africa where pig farmers are largely dominated by women (69.7%). The low rate of participation of women in pig production is linked on the one hand to the fact that pigs, given their aggressiveness, are difficult animals to handle. Sambou (2008) noted in this work that the maintenance and supervision of animals were entrusted to women. The dominant age group (46.66%) was 40 to 50 years old. This age range was very close to that highlighted by Monaté *et al.,* (2008) and Ognika *et al.,* (2022) who found that the dominant age group (34.80%) was 30-40 years old.

Most of the breeders were married (86.66%) employed or engaged in a profession such as agriculture, breeding, commerce, etc. The majority (70%) had not received any training in breeding. This shows that pig farming is a secondary activity and is done with the aim of diversifying sources of income in order to secure families. These results are consistent with those obtained by Mopaté (2002) in N'Djamena in Chad and those observed by Youssao *et al.,* (2008) in Benin reporting that pig farming is a complementary economic activity for almost all socio-professional categories. Thus, the level of education and socio-economic status hardly constitute a barrier to the practice of pig farming in the north of the country (FAO, 2012).

The average size of the pig farms visited is 23 head. This size is close to that observed by Sambou (2008) who reported 20.8 heads in Senegal. This is explained by the fact that the farms are family type. The overall composition of pig farms, where fattening pigs predominate, can be explained by the fact that the farms visited are predominantly of mixed type (96.66%). These results are consistent with those of (Brou *et al.,* 2020) and (Tra Bi, 2009) in Côte d'Ivoire. Most breeders (66.67%) prefer to make their own feed with 2 or 3 raw materials compared to 33.33% who use industrial feed. The same finding was reported by FAO (2012). This author indicates that breeders, thinking of saving money, often use raw materials alone or mixed without applying the basic notions of balancing the food rations distributed to the animals.

Sales prices vary from one farm to another, from one customer to another depending on the breed, size and category of pig. The average price of a young to adult pork butcher varies from 8,000 to 70,000 FCFA for local pork and from 15,000 to 120,000 FCFA for improved breed pork.

Table.1 Geographical distribution of players in the pork sector

Sub-prefectures	Breeders		Food supplier		Transformers		Consumers		
	Nb.	P. (%)	Nb.	P. (%)	Nb.	P. (%)	Nb.	P. (%)	Total
Korhogo	8	26,67	13	65	20	68,96	65	67,71	98
Tioro	6	20	1	5	4	13,79	14	14,58	25
Napie	11	36,67	3	15	4	13,79	10	10,42	28
Karakoro	5	16,66	3	15	1	3,45	7	7,29	16
Total	30	100	20	100	29	100	96	100	167

Nb. : Number ; **P.** : Pourcentage

Table.2 Different places to source pork feed

Sub-prefectures	Structures	Proportion (%)
Korhogo	Provende Mill	20 45
Tioro	Provende Mill	00 5
Napie	Provende Mill	00 15
Karakoro	Provende Mill	00 15

Table.3 Caractéristiques socio-démographiques des acteurs

Characteristics		Breeders		Transformers		Consumers	
		Nb.	P. (%)	Nb.	P. (%)	Nb.	P. (%)
Nationality	Ivorian	30	100	28	96,55	96	100
	Burkinabe	0	0	1	3,45	0	0
Ethnicities	Sénoufo	28	93,33	12	41,38	35	36,46
	Baoule	0	0	7	24,13	20	20,83
	Agni	1	3,33	3	10,34	15	15,62
	Autres	1	3,33	7	24,13	26	27,08
Sex	Man	**20**	66,67	12	41,37	80	83,33
	Women	**10**	33,33	17	58,62	16	16,67
Age range	Moins de 20 ans	**0**	0	0	0	4	4,17
	20-30	3	10,00	4	13,79	25	26,04
	30-40	4	13,33	10	34,48	50	52,08
	40-50	14	46,66	14	48,27	15	15,62
	50-60	7	23,33	1	3,44	1	1,04
	60 et plus	2	6,67	16	55,17	1	1,04
Marital status	Married	26	86,66	2	6,89	45	46,87
	Unmarried	2	6,67	1	3,44	26	27,08
	Widowed	2	6,67	10	34,48	25	26,04
Religion	Christian	21	70	17	58,62	30	31,25
	Muslim	2	6,67	1	3,44	25	26,04
	Animist	7	23,33	11	37,93	41	42,71

Nb. : Number ; **P.** : Pourcentage

Table.4 Characteristics of the farms

Characteristics		Number	Pourcentage (%)
Level of study	Unschooled	10	33,33
	Primairy	8	26, 67
	Secondairy	9	30, 00
	Superior	3	10
Management	No	10	33, 33
	Yes	20	66, 67
Management structure	ANADER	2	6, 67
	Veterinarian	17	56, 66
	Livestock trainer	11	36,67
Livestock training	No	21	70, 00
	Yes	9	30
Breeding status	Private producer	29	96, 67
	Association	1	3, 33
Breeds	Local	11	36, 67
	Improved	14	46, 67
	Both	5	16, 66
Breeding system	Traditional	15	50, 00
	Semi-intensive	13	43, 33
	Intensive	2	6, 67
Type of breeding	Reproduction only	0	0, 00
	Fattening	1	3, 33
	Mixed	29	96, 66

Table.5 Overall composition of pig farms

Composition	Minimum	Average	Maximum	Frequency (%)
Total workforce	02	23 ± 4,20	126	100
Sows	01	3,17 ± 0,57	08	13,78
Boars	01	1, 03 ± 0,19	03	4,48
Gilts	02	1,56 ± 0,28	08	6,78
Undermother piglets	03	5,33 ± 0,91	33	23,17
Post-weaning piglets	02	4,73 ± 0,86	25	20,56
Fattening piglets	01	5,73 ± 0,93	38	24,91

Table.6 Supply of food, breeding equipment and sanitary products

Characteristics		Number	Pourcentage (%)
Pig feeding	Purchase	10	33,33
	Personal wording	20	66,67
Food Suppliers	Local produce stores	10	33,33
	Resellers	20	66,67
	Import	0	0
Payment terms	Cash	20	66,67
	Credit	0	0
Acquisition of equipment	Bought at the market	15	50
	Made themselves	9	30
	Both	6	20
Supply of sanitary products	No care	3	10
	olunteer at veterinarian	6	20
	Street drugs	3	10
	Veterinary visit	18	60

Table.7 Method of pigs selling

Characteristics		Number	Pourcentage (%)
Places of sale	Privé (Domicile ou ferme)	29	96,67
	Market	1	3,33
Sales method	At live weight	10	33,33
	Estimated	20	66,67
Payment	Cash	26	86,67
	Credit	2	6,67
	Both	2	6,67

Table.8 Pig sales prices

Characteristics		Improved breed	Local breed	Price of one kg
Selling price of an animal	Minimum	15000 FCFA	8000 FCFA	1500 FCFA
	AVERAGE	45000 FCFA	30000 FCFA	1800 FCFA
	Maximum	120000 FCFA	70000 FCFA	2000 FCFA

Table.9 Distribution of activities of pork feed manufacturers

Parameters		Number	Pourcentage (%)
Activities	Production	20	100
	Food sales	20	100
Raw material used	Corn	16	80
	Wheat, soy and corn	4	20
Place of supply	Foreign country	4	20
	Local markets	10	50
	Village	6	30
Fournisseurs	Company	2	10
	Farmer	8	40
	Traders	10	50
Méthode de vente	Bulk	3	15
	In detail	1	5
	Wholesaler and retailer	16	80

Table.10 Activities of pork processors

Parameters		Number	Pourcentage (%)
Activities	Sale of pork	5	17, 24
	Processing into meat products	0	0
	Restoration	24	82, 75
Suppliers	Farm	11	37, 93
	Resellers	18	62, 06
Supply locations	Farm	11	37, 93
	Market	11	37, 93
	Slaughterhouse	4	13, 79
	Super market	3	10, 34
Customers	Households	2	6,89
	Restaurants	7	24,13
	Industries	0	0,00
	Individual	20	68,96
Sale of products	Bulk	1	3,44
	In detail	21	72,41
	Wholesaler and retailer	7	24,13
Customer satisfaction	No	13	44,82
	Yes	16	55,17
Purchase method	At live weight	12	41,38
	Estimated	17	58,62
Payment	Credit	10	34,48
	Cash	19	65,51
Family business	No	11	37,93
	Yes	18	62,06

Table.11 Characteristics of consumer activities

Parameters		Number	Pourcentages (%)
Pork consumers	Yes	71	73,96
	No	25	26,04
	Total	**96**	**100**
Products purchased	Ember	30	42, 25
	Porc au four	10	14, 08
	Soup	25	35,21
	Fresh meat	4	5, 63
	Sausage	2	2, 82
	Whole pork	0	0, 00
	Total	**71**	**100**
Supply locations	At the restaurant	25	35, 21
	At market	7	9, 86
	By the side of the road	39	54, 93
	Super market	2	2,82
	Total	**71**	**100**
Suppliers	Butcher	1	1, 41
	Wholesaler	7	9,86
	Retailer	20	28, 17
	Pork seller	35	49, 30
	Farm	8	11, 27
	Total	**71**	**100**

Table.12 Constraints of the different players in the pork sector

Actors	Contraints	Number	Pourcentage (%)
Breeders	Lack of finance	30	100
	Self-financing	30	100
	Lack of training	24	80
	Inbreeding rate	20	66,67
	High cost of feed	30	100
Food suppliers	High cost of raw materials	16	80
Transformers	Lack of support from the State	29	100
	Unorganization	29	100
Consumers	High price of meat	71	100

For sale by live weight, the price varies from 1500 to 2000 FCFA per kg live. Djimènou *et al.*, (2021) recorded a price per kilogram of fresh meat without bones costing 2793.26 FCFA while that with bone cost 2366.66 FCFA. These results are higher than those of Ayssiwede (2004) who found the price of live weight varies from 600 to 900 FCFA per kg. The variation in the price of a kilogram relates to the cost of food inputs, labor, transport and breeding equipment.

Four (4) feed mills were visited. These are IVOGRAIN, Koudjis, Maridave, and also the company ETS Adama which formulates pig feed to order from breeders. Production units obtain their supplies partly from local markets and national farmers. Some products are imported from the sub-region (Ghana for soybeans, Benin for cotton), from France (wheat), from Brazil (soybeans), from Argentina (corn). The same observation was made by Tra Bi (2009).

Pig meat processing is an activity mainly practiced by women (58.62%). These results are in agreement with those of Toviehou (2012). The involvement of women in processing reveals that this activity constitutes a significant source of income for the household. Indeed, according to FAO (2004), family agricultural activities represent one of the many integrated and complementary activities of the farming system which contributes to its general well-being. The processed products were generally the same as those identified in the N'Djamena area (grilled meat, fried meat and meat soup) by Mopaté *et al.,* (2008) and in other cities such as Abidjan, Ougadougou and Yaoundé (Mopaté and Kaboré-Zoungrana, 2013). The places of consumption were, for the most part, drinking establishments, notably cabarets for traditional drinks, maquis, on the sides of the streets and bars for others. The same observations were reported by Mopaté *et al.,* (2008); Mopaté and Matna (2012) and Kiendrébeogo *et al.,* (2012), respectively in Niger, Benin and Burkina Faso. This would explain the opportunities offered by these places of sale of drinks in the marketing of processed products from this sector. Three main categories of processors were encountered in this study: charcutiers-restaurateurs, charcutiers and restaurateurs with a predominance of charcutiers-restaurateurs (82.75%). This variability in the categories of processor encountered in the present study shows that pork meat is very popular among populations despite the constraints linked to socio-religious prohibitions (Atodjinou and Dotcho, 2006). In addition, most consumers (83.33%) of pork are men. This low frequency of women is explained by the fact that in Africa, by tradition, women are for the most part housewives and caretakers (Miller, 2001).

Conclusion

This present study, carried out to better understand the pork sector in the Department of Korhogo, was carried out in four sub-prefectures (Korhogo, Karakoro, Tioro and Napié). The analysis of the structure and operation of the farms surveyed reveals that pig farming is practiced mainly by men (66.67%) and is considered an important source of income. In addition, 93.33% of the breeders were Sénoufo and 70% were Christians. The overall average composition of the pig farms visited is 23 ± 4 animals with a predominance of fattening pigs (5.73 ± 1) and mother piglets (5.33 ± 1). The farms visited are essentially of the mixed type (farmer-fattener) in 96.67%. Analysis of data on pig feeding practices shows that 33.33% of breeders buy complete pig feed in feed mills and 66.67% made personal formulations. Traditional systems represent 50% of the farms visited, compared to 6.67% for modern systems. The economic analysis reveals that the minimum selling price is 8,000 FCFA for local breed pigs and 15,000 FCFA for improved breed pigs. The maximum price of an improved animal is 120,000 FCFA and that of the local breed is 70,000 FCFA. The price of one kilogram of live weight varies from 1500 to 2000 FCFA. Several ethnic groups (Sénoufo, Baoulé, Peulh, Gouro) are interested in the processing of pigs in the Korhogo department and there is no processing of industrial meat products. The majority of processors do catering (82.75%) and 58.62% of women practice this activity. Pork consumers appreciate braised meat more (42.25%).

References

Atodjinou, F. T. R. and Dotcho C. D. G. 2006. Caractéristiques de l'élevage des porcs locaux dans les élevages périurbains de Cotonou et d'Abomey-Calavi. Diplôme d'Études Agricoles Tropicales, Lycée Mèdji de Sékou, Bénin.

Ayssiwede, S. B., 2004. La filière porcine au Bénin : production, commercialisation, propositions d'amélioration et perspectives de développement. Thèse de Méd. Vét., Bénin.

Brou G. K. G., C. F. D. Adou, M. Meniga, and Soro R. Y. 2020. Caractérisation des élevages porcins dans le Département de Korhogo, J. Appl. Sci. Envir. Stud. 3 (3) : 183-198. https://doi.org/10.48393/IMIST.PRSM/jases-v3i3.18077

Diao M. B. 2004. Situation et contraintes des systèmes urbains et périurbains de production horticole et animale dans la région de Dakar. Cah. Agric, 13 (1) : 39-49.

Djimènou D., M. C. Adoligbé, E. P. S. Mensah, B. A. Aboh, K. A. Edénnakpo, G. S. T. Atchadé, and Koudandé O. D. 2021. Transformation et commercialisation de la viande de porcs au Sud du Bénin : Caractéristiques socioéconomiques et contraintes. Journal of Animal & Plant Sciences, 48 (1): 8618-8636.

FAO 2004. Banques de données. FAOSTAT, Agriculture, 10 p.

FAO 2012. Pertes et Gaspillage Alimentaire dans le Monde: Ampleur, Causes et Prévention. Etude Menée pour le Congrès International SAVE FOOD. FAO, Rome ; 41p.

FAO 2020. Peste porcine africaine des cas isolés de la maladie dans le Nord et aujourd'huit dans l'Ouest du pays.FAO, Dabou, 1p.

Halimani T. E., F. C. Muchadeyi, M. Chimonyo, and Dzama K. (2012). Some insights into the phenotypic and genetic diversity of indigenous pigs in southern Africa. S. Afr. J. Anim. Sci.,42(5) : 507-510. https://doi.org/10.4314/sajas.v42i5.13

Houndonougbo M. F., S. Adjolohoun, B. A. Aboh, A. Singbo and Chrysostome C. A. A. M. 2012. Caractéristiques du système d'élevage porcin au Sud-Est du Bénin. Bulletin de la Recherche Agronomique du Bénin (BRAB), Numéro spécial Elevage & Faune, 21 p.

Kiendrébeogo T., L. Y Mopaté, S. R. Kondombo and Kaboré-Zoungrana C. Y. 2012. Approvisionnement en porcs vifs et viande porcine de la ville de Bobo-Dioulasso (Burkina Faso). J. Agric. Environ. Int. Dev, 106 (2): 105-122. https://doi.org/10.12895/jaeid.20122.66

Miller B. A. 2001. Empowering women to achieve Food Security. Rights to Livestock. International Food Policy Research Institute, 4 p.

MIPARH 2006. Programme d'appui à la redynamisation de la filière porcine-Abidjan, SIVAC, 22 p.

Mopaté L. Y. 2002. Productivité des élevages porcins dans les départements du Logone occidental, du Mayo-Dallah et de la Kabia en zone soudanienne du Tchad. Rapport de mission. N'Djamena, Tchad, Lrvz., 15p

Mopaté L. Y. 2008. Dynamique des élevages porcins et amélioration de la production en zones urbaine et périurbaine de N'Djaména (Tchad). Doctorat thèse Unique, Université Polytechnique de BoboDioulasso (UPB), Burkina Faso, 246p.

Mopaté L. Y. and Kaboré-Zoungrana C. Y. 2010. Dynamique des ´élevages et caractéristiques des producteurs de porcs de la ville de N'Djamena, Tchad. Actes du colloque « Savanes africaines en développement : innover pour durer »du 20-23 avril 2009, Garoua, Cameroun, 10 p.

Mopaté L. Y. and Kaboré-Zoungrana C. Y. 2013. Production, commerce et consommation de la viande porcine dans quelques villes d'Afrique de l'Ouest et du Centre. Rev. Sci. Tchad, 13 (2) : 34-44.

Mopaté L. Y. and Matna M. M. (2012). Approvisionnement, transformation et consommation hors-foyer de porcs dans la ville de Moundou (Tchad). Rev. Sci. Tchad, 11 (spécial) : 53-62.

Ndébi G., Kamajou J. and Ongla J. 2009. Analyse des contraintes au développement de la production porcine au Cameroun. Tropicultura, 27(2) : 70-76.

Ognika A. J., N. S. Dimi, D. C. Ekou, M. Bahouna and Akouango P. 2022. Effets du *Moringa oleifera* sur les performances de croissance du lapin *Oryctolagus cuniculus*. J. Appl. Biosci. 168: 17468 – 17476. https://doi.org/10.35759/JABs.168.5

Sambou G. 2008. Analyse des impacts de la décharge de Mbeubeus (Dakar) sur les élevages porcins environnants, Thèse Médecine Vétérinaire (E.I.S.M.V.), Bénin.

Toviehou A. B. 2012. Caractéristiques des secteurs de transformation et de consommation de la filière viande porcine dans les Départements de l'Ouémé et du Zou au Bénin Rapport de Fin de Formation de Licence Professionnelle en Production et Sante Animales. Ecole polytechnique d'Abomey-Calavi, Bénin.

Tra Bi T. C. 2009. Filière porcine en Côte d'Ivoire : production, propositions d'amélioration et perspectives de développement. Thèse Médecine Vétérinaire, E.I.S.M.V., Bénin.

Youssao A. K. I., G. B. Koutinhouin, T. M. Kpodékon, A. G. Bonou, A. Adjakpa, C. D. G. Dotcho and Atodjinou F. T. R. 2008. Production porcine et ressources génétiques locales en zone périurbaine de Cotonou et d'Abomey-Calavi au Bénin. Revue Elev. Méd. Vét. Pays Trop., 61(3-4) : 235-243. https://doi.org/10.19182/remvt.9995

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