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MANAGEMENT OF DOMESTIC ANIMALS WITH THE PROOF OF ENVIRONMENTAL PROTECTION. SURVEY CONDUCTED IN THE DISTRICT OF LOKUMETE IN BASOKO TERRITORY, TSHOPO PROVINCE IN DR CONGO.

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ABSTRACT

The crisis in agricultural and veterinary training experienced by sub-Saharan African countries in general and the DRC in particular is one of the consequences of the social, economic and ecological crisis in that country. The anarchic pressure of livestock farming, in the rugged topography district of LOKUMETE. Remains a permanent danger to the environment.

An environmental and social impact study was carried out in this district to identify the environmental collateral effects.

The analysis of the results showed us that the wandering of domestic animals is at the root of the destruction of the property of others, conflicts between breeders and non-breeders, environmental pollution. The State must assume its responsibilities in order to protect the population from this danger.

KEYWORDS: Management, domestic animals, protection, environment, Basoko, DR Congo.

I. INTRODUCTION

The crisis in agricultural and veterinary training experienced by sub-Saharan African countries in general and the DRC in particular is one of the consequences of the social, economic and ecological crisis raging in this country (MASIMAGO, N: 2006).

Agriculture and livestock must be realized as a profession, a profession by technicians who will be able to create jobs not only for themselves but also for others;

With the development of the crisis, agriculture and livestock have become alternatives of survival because almost all villagers depend on them.

Livestock farming, in fact, remains a sector of which the majority of the rural population of DR Congo uses to support livestock and the lack of supervision of livestock farmers present a permanent danger to the socio-economic-sanitary environment of the population.

The anarchic pressure of livestock farming in the rugged district of LOKUMETE remains a permanent danger, because most of the water sources used for drinking are located to the bottom by collecting droppings, household waste that is conveyed by sacred runoff that says that "water is life".

Nevertheless, water is no longer brought life to the inhabitants of LOKUMETE, water becomes a factor limiting the growth,

The development, the life, the healthy life that was to project the people into the Millennium Development Goals (FAO, 2000). Given that the breeding of small and large livestock provides necessary income for practitioners, it is necessary that breeders take their part in the management of land management plans on the basis of a dynamic consensus with the State, so that zootechnical resources are exploited in the respect and stability of the ecosystem to ensure healthy life in a healthy environment (CARRIERE, M, 1996). MAFWALA (2006) says: "On the other hand, we must take advantage of natural resources within the limits of ecological balance and in harmony with the environment". Managing livestock farming requires mastery of certain practices, but the one practiced in LOKUMETE attracts our curiosity by asking us certain questions:

- What are the types and methods of livestock farming that are practiced in the LOKUMETE district?
- How are prophylactic conditions observed?
- What are the challenges observed in this management mode on environmental protection?

Faced with this concern, our study proposes to verify the hypotheses according to which LOKUMETE being a terrain with rugged topography and whose peripheries are dominated by watercourses, the breeding of small and large livestock would be of the traditional type whose prophylactic conditions as well as the absence of an ideal management plan for the choice of the livestock site would be at the root of the degradation of the environmental conditions of the environment. The wandering animals would be at the root of the destruction of houses, infrastructure, damage to crops and destabilize social relations between herders and their neighbors.

The objective of this study is to identify the types and methods of livestock farming practiced in the LOKUMETE district as well as the damage caused by the latter on the environment of this entity.

II. MEDIUM, MATERIAL AND METHODOLOGY

The district of LOKUMETE which constitutes the framework of this research is located in the Territory of Basoko, in the Province of Tshopo, precisely in the former city Basoko.

The district of LOKUMETE has an area of 16Km² with an estimated population of 14464 inhabitants and its geographical coordinates are as follows: its altitude varies between 120 to 180 meters with a latitude varying from 26 °. It is located between 23 ° and 25 ° of residue (GOTTART, cited by THOENGAO 1984), its climate is of the tropical type characterized by two dry and rainy seasons. The rainy season that lasts from April to November and a dry season that goes from December to March of each year. Its vegetation consists of alternate forests in the form of mosaic with considerable spaces covered with tall grass. Lokumete is a region with rugged topography and whose peripheries are dominated by rivers, the Pratoical breeding of small and large livestock is of the traditional type in which the animals are wandering. It should also be noted that LOKUMETE is an entity managed within the PHC / Feronia company, some of whose inhabitants are workers or agents of the company and others take care of formal and informal activities to meet their daily needs. Slash-and-burn peasant agriculture is practiced on plantation beds, livestock farming in residential plots and some household members practice artisanal fishing on the Congo River; others also hunt.

The environment being poor, the population lives on a drop of one dollar a day (national survey of the type 1-2-3; 2013). The agricultural product having a character of rarity, several people embark on the poaching of palm nuts to meet certain economic and financial needs of households.

The main crops are cassava, rice, bananas and the most frequent livestock is porciculture, capriculture and poultry. Only PHC/Feronia focuses on large livestock.

The material of our research consists of domestic animals as well as the environment of the environment. In order to determine the types and methods of rearing as well as the damage caused to the environment, we use the systemic approach. The latter allowed us to compare the types and methods of practical breeding and the damage caused in the environment. The data collection techniques focused on observation of facts, interviews, questionnaires and documentation that allowed us to get in touch with our respondents, exchange and discuss in depth for certain situations.

Our sample was drawn at random 30 respondents divided into two stages: - in the first degree, we selected 30 breeders, 17 for pigs, 7 for goats, 5 for sheep and only one survey for large livestock.

The purpose of our survey is to collect all information related to the management of pets and their consequences on the environment of the aforementioned district.

III. RESULTS

Analysis and identification of a problem, collection of information, processing and elaboration of proposals.

In this part we give the state of pet management.

Table 1: Types of livestock raised

Type of livestock	Frequency	%
Porcine	17	56,67
Goat	7	23,33
Sheep	5	16,66
Cattle	1	3,34
Total	30	100

Source: field survey, April 2021.

Table 1 shows that the majority of farmers, 56.67% raise pigs, 23.33% raise goats, 16.66% raise sheep and 3.34% raise cattle.

Table 2: Method of rearing

Method of rearing	Frequency	%
Rambling	22	73,33
Enclosure	8	26,67
Total	30	100

Source: field survey, April 2021.

Table 2 shows that 73.33% of farmers leave their animals wandering against 26.67% of them who keep their cattle in the pen.

Table 3: Grazing of wild-raised livestock

Opinion	Frequency	%
Yes	28	93,33
Name	2	6,67
Total	30	100

Source: field survey, April 2021.

The examination of Table 3 notes that 93.33% of respondents say that grazing cattle is done in the wild, that is to say in the environment outside their barn against 6.67% who do it in the pen.

Table 4: Farmers' opinions on damage caused by livestock in gardens or other property of others.

Opinion	Frequency	%
Yes	22	73,33
Not	8	26,67
Total	30	100

Source: field survey, April 2021.

73.33% of the farmers surveyed are of the opinion that wandering cattle cause damage in terms of destruction and in gardens against 8% of farmers who reject this claim.

Table 5: Livestock manure management

Management	Frequency	%
In the enclosure	4	13,33
In the environment	25	83,33
In the trash can	1	3,34
Total	30	100

Source: Field survey April 2021.

It is noted in Table 5 that livestock droppings are found here and there in the environment. Confirmation made by 83.33% of respondents. Due to lack of maintenance, there is also manure in the pen where the cattle are housed (13.33%).

Table 6: Location of the pen

Location	Frequency	%
Close to neighbor	20	66,7
On the slope	3	10
In the plot	4	13,3
In a compliant location	3	10
Total	30	100

Source: field survey, April 2021.

From the observation made in Table 6, we retain the following: 66.7% of breeders say that the location of livestock pens is closer to neighbors, 13.3% testify that their pens are placed in the plots, 10% emphasize that their locations are on loss and in non-compliant places.

Table 7: Types of animals polluting the environment

Type	Frequency	%
Pigs	19	63,33
Goats	6	20
Sheep	5	16,67
Total	30	100

Source: field survey, April 2021.

The results presented in Table 7 confirm pigs (63.33%) as environmental polluters, followed by goats (20%) and finally sheep (16.67%). All this, because they are not in the pen.

IV. DISCUSSION OF RESULTS

a. Identification of types and methods of rearing

Our study showed that it is the pig species that is higher unfortunately it lives in wandering. Several reasons may justify the preference of breeding this species: it gives birth to more than five or more piglets and this twice a year. This would quickly increase the livestock of the breeder. Secondly, it is a meat preferred by the inhabitants of the middle who are not Muslims. Finally, the selling price of a three-month-old piglet far exceeds the selling price of a kid of the same age.

To this question, the literature tells us that livestock products consumed and marketed by humans play a substantial role in feeding the local community and peri-urban economies (Lambert et al, 2009).

With the development of the crisis, agriculture and livestock have become alternatives for survival because almost all villagers depend on them.

Wandering as a method of breeding is applied by the majority of breeders because of lack of means for the construction of enclosures, but also following the inefficiency of State services, including environmental services.

The legal issues of environmental protection against wandering domestic animals have been addressed in several countries and for Eric POSAK (2007), he observes that legislation has therefore been strengthened to try to stem the wandering of domestic animals and its consequences by adopting

the policy on two complementary aspects including criminal prosecution and administrative police measures.

For Congolese legislation in its article 114 of the ordinance – law 54 bis agri of 05/05/1935 prohibits the wandering of domestic animals in extra-customary environments and therefore all animals captured by the State must be put in a pound and authorizes the destruction of this animal in case of non-presentation of the breeder. The need to understand the issues of small livestock farming in topographically rugged environments is timely.

b. Damage caused by animals

Many farmers are inanimate that wandering livestock, especially the pig species, is causing various kinds of damage to the environment. We can mention: the destruction of road infrastructure, the destruction of shared gardens, the pollution of unfenced water sources, droppings here and there in the environment.

On the social level, this hope is a source of conflict between breeder and non-breeder who does not profit from the beast. This is also confirmed by the study by MOMBELA (2010).

Livestock by the way, remains a sector that the majority of the rural population of the DRC uses to meet their primary needs. However, the lack of mastery of breeding techniques and non-supervision of livestock farmers present a permanent danger to the socio-economic-sanitary environment of the population.

The anarchic pressure of livestock farming in the rugged district of Lokumete remains permanent, because most of the water sources used for drinking are located to the shallows, thus collecting droppings, household waste that is conveyed by the runoff and thus pollutes the water upsetting the sacred adage that says that "the eau is life". The State, through its environmental service, has an obligation to ensure this state of affairs in order to protect the population from various diseases.

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