

## SHORT COMMUNICATION

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**The organization of Food Safety marketing of small ruminants in Albania**ZOJE JAKAJ<sup>1</sup>, SHEMSHO LAMAJ<sup>2</sup>, PËLLUMB VELA<sup>2</sup><sup>1</sup>“Kristal” University of Tirana<sup>2</sup>Directory Veterinary, District of Gjirokaster, Albania**Abstract**

The study was carried out during the period 2009-2012. The main objectives of the study are as follows: market organization and set-up, place and the distance between market and producers, respecting animal welfare standards, animals' transportation, data collection on markets (*development, trends and questions*). Livestock markets of five regions including Tirana, Korça, Shkodra, Milot and Shijak were at the focus of the study. The zonal estimation method was utilized for the purposes of the study. The method was applied in five markets spreading across the afore-mentioned districts. For each district 100 farmers administering 20-50 heads (animals) were randomly included in the study. On average 35 heads ( $\pm 18$ ) lambs and young goats were marketed by any of the above representing farmers. The period spanning in-situ market surveillance lasted for 80 days (one day/week- market day). In addition, 3 slaughtering facilities and 20 meat dispensing shops for each district -Tirana, Korça and Shkodra as well as 30 and 10 improvised selling points at Milot and Shijak areas were respectively surveyed with regard to slaughtering techniques, hygienic sanitary conditions, livestock marketing conditions etc. Alongside direct zonal assessment and contacts established with farmers, secondary data received by the Office of Statistics (DRBUMK) and MAFPC were utilized. Data was statistically processed and analyzed by way of ANOVA. The study pointed to the following findings: Marketing infrastructure is almost lacking. Slaughtering capacities in facilities are not utilized properly. Only 15 % of meat shops have refrigerators in place.

**Key word:** livestock marketing, slaughtering facilities, regulations, district, hygiene.

**1. Introduction**

The rough transformation of centralized economies into free market economies is very often associated with the disintegration of production, collection, processing and marketing structures of both agricultural and livestock products [4]. There were questions poised with regard to market supply and meeting food requirements for consumers.

Producers, sellers and consumers find themselves at odds with the free market conditions. The sale of products is related to immediate needs of families that produce agricultural and livestock products without being aware of the existing market demands. Words like “market” and “marketing” were recently coined and introduced to the Albanian economy [13]. Production activities of farms were very often not rentable. There was little or no knowledge about market economy. There were also subjective hindrances to obtaining incomes from goods sold.

Actually in many cases markets are not adequate in number. These are some places which don't comply with the minimum conditions of marketing and meeting food safety requirements. Animals are

marketed without certificates of veterinary services. Animals which do not go through veterinary check might easily become sources of infective and parasitic diseases as well as raising question marks over food safety. Both the livestock sales and the slaughtering of animals is done in these markets. There is no auction of livestock so the animal price is not realistic.. There are shops for selling dairy and meat products besides livestock markets, collecting points and refrigerated rooms. These units are continuously checked by veterinary and human health inspectors. So, there is an added care in relation to food safety [11]. For purposes of analysing the current situation the study was undertaken by the National Small Ruminant Association

The study was carried out during the period 2009-2012. Its ensuing objectives are as follows: market organization, place, the distance between market and producers, respect of animal welfare standards, animals' transportation, data collection on market (*development, trends and questions*) and recommendations with regard to solving questions.

**2. Material and methods**

The livestock markets of five regions including Peshkopi, Shkoder, Lezhë Milot, Tirana, Korça and Durres were at the center of the study. The zonal estimation method was implemented. This method has its advantages given the information infrastructure conditions existing in the country. The method was applied in 5 markets of the above mentioned districts.

For each district 15-20 farmers that managed 30-50 heads were randomly comprised in the study. On the average 35 heads ( $\pm 18$ ) lambs and kids were marketed by the representing farmers. Parallel to questionnaires to be completed by farmers *in situ* surveillance of physical marketing structure and marketing animal conditions as well as veterinary and zootechnical documents that accompanied them were administered. 500 persons were asked to answer questions about livestock markets.

The zonal estimation method was applied. For each district 100 farmers that administered some 20-50 heads were randomly included in study. The period of *In situ* market surveillance lasted for 80 days (one day/week- market day). In addition, 3 slaughtering facilities and 20 meat shops for each district in Tirana, Korça and Shkodra as well as 30 and 10 makeshift sales points in Milot and Shijak areas were respectively surveyed with regard to slaughtering techniques employed, hygienic sanitary conditions observed and livestock markets established etc. In addition, farmers and consumers were asked questions about the situation of small ruminant farms and markets. Along with direct zonal assessment applied and contacts established with farmers, secondary data received by Office of Statistics [13] and MAFPC were used. Data was statistically processed by way of ANOVA

### 3. Results and discussion

The situation surrounding small ruminant farms across the districts of Peshkopa (Kala e Dodës), Shkodër (Malsia Madhe) Lezha (Commune “Balldre”), Milot (town market), Tirana (Commune “Shengjergj”), Korça (city market, Communes (“Pojan”, Drenova, Vreshtas, Lubonik, Mollaj) Durres , ( Commune “Sukth”) was closely observed:

- Arable land according to districts :
  - Tirana 0.05 -0.13 Acre/ capita,
  - Korça 0.15 –0.32 Acre/ capita,
  - Lezha 0.15 – 0.33 Acre/ capita,
  - Durresi 0.1 – 0.20 Acre/ capita,
- Small arable land for family is one of the limiting factors for agriculture and livestock development;

- Farms are situated far away from markets. Hence access to sales points of products is difficult;
- Shelters for raising small ruminants don't meet the animal welfare standards;
- There is no information system available to farmers about prices of animal products at markets;
- Road Infrastructure is inadequate and poor;
- 7- 90 % of small ruminant farms are characterised by traditional system of meat production. Lambs and young goats graze together with their adult ones. There are no specialized commercial farms for meat production.
- There is no knowledge about legislations with regard to standards of animal slaughtering (live weight and animals' age,) hygienic conditions etc.

#### *Animal slaughtering and livestock market,*

- Animal's slaughtering on livestock market ignore the rules and control. There are a lot of cases observed when animals are slaughtered in the front of or at the back of meat selling points to reinforce the mentality in people that the meat is domestic product.
- The remains after slaughtering process are not treated observing the hygienic requirements, hence bringing about environmental pollution.
- Slaughtering points do not meet veterinary conditions. Slaughtering techniques are often inadequate due to the lack of equipments and butcher's poor skills.
- In fact the veterinary inspectors that check meat do not take into consideration the procedures prior to the slaughtering, the act of slaughtering itself and the transportation to the selling points. It is very worrisome that, in some cases, both the animal slaughtering and the carcass marketing were done simultaneously at the same time;
- Dealers are not very often notified by the respective municipalities when shifting livestock market places, hence bringing about confusion;
- In all the surveyed cases it turned out that animals were sold without being accompanied by the veterinary certificate, becoming thus sources of spreading infections.
- The number of animals slaughtered in slaughtering facilities is far less than that

animals slaughtered outside the abattoirs. Thus the small number of animals being slaughtered doesn't justified investment done to this effect.

- The slaughtering of animals is very often done contrary to veterinary controls and checks. This makes the control of epizootic very difficult.
- In many cases, although there are public or private abattoirs, the slaughtering of animals and preliminary processing of meat before selling moment are performed in full disregard of veterinary controls.

*Meat markets, shops and opened selling points.*

- Meat transportation and distribution to meat shops is sometimes carried out by no refrigerated vehicles and as a consequence hygienic conditions are very poor. It is necessary to emphasize that meat selling shops have in place markedly improved conditions of meat maintenance and marketing.
- Over 95% of meat shops are equipped with refrigerated cabinets. Meat transportation to shops within the market is sometimes done by the uncovered wheel barrows.
- In Tirana market; the meat is removed from refrigerated boxes for selling and the unsold part is put again back into refrigerated boxes. So, meat quality is lowered and human health may be exposed to risks. The same phenomenon was observed in meat markets across other districts.
- In Korça market; meat was sometimes marked without veterinary seal for poor hygienic sanitary condition.

*Abattoirs*

Abattoirs of Tirana, Korça, Durres districts were observed.

- These abattoirs are equipped with necessary tools for slaughtering of animals and carcass processing.
- Their capacities were not fully utilized. A small number of ruminants were slaughtered in Tirana and Korça slaughtering facilities. The conditions inside do not meet technical conditions ( walls are not covered with stone flabs, no guaranteed water system), no place for animals to be kept before the slaughtering process.

- Slaughtering points of animals in Korça district do not meet hygienic sanitary standards. These units supply public-run institutions with meat including hospitals and universities in the city undermining thus food safety.
- There is a private slaughtering facility in Durres district. The number of animals slaughtered is based on the number of requests coming in. There are no special clothes to be worn by the abattoir personnel.

*Food safety standards and legislation*

- There is not enough knowledge about EU and Domestic Laws and Regulations regarding the conditions and standards that are compulsory to be observed with respect to animals being slaughtered.
- Food Safety Systems like: Analysis of 'Risk and Critical Check Point '(HACCP), GMP and ISO are not observed. There are only facilities for microbiological analyses of meat
- There are some EU Regulations in place like:
  - Regulation No. 852/2004 dated 29 April 2004; on "Food Hygiene"
  - Regulation No. 853/2004 dated 29 April 2004; on "Special Hygienic Criteria for Origin of Animal Food products"
  - Regulation No. 854/2004 dated 29 April 2004 on " Procedures for origin of animal related product"
- In fact the activities of veterinary inspectorates are based on the legal framework like Law on "Veterinary Service" and other related sublegal acts, as well as Law on "Food Safety" and Law on "Food labeling".
- Veterinary and food inspectors located at the local government levels are responsible for checking slaughtering facilities, livestock markets and meat and dairy products. Until this point in time these structures are under the subordination of Ministry of Agriculture, Food and Protection of Consumers.
- Situation is very worrisome from both the institutional and legal viewpoints for human health as well as environmental pollution.

- In order to meet the required standards with regard to animal slaughtering, livestock marketing as well as marketing of meat and dairy products an effective solution has been provided by combining the actual control structures within a institution which is called the National Food Safety Agency;

#### 4. Conclusions

- Small land size available to small ruminant farms stunts their development;
- Small land size available is one of the main factors that limits considerably the agricultural and livestock development;
- Far distance between small ruminant farms and markets makes the sale of animal products difficult
- Small ruminants' shelters do not meet minimum standards of animal welfare;
- Farmers are not informed about prices of animal products at the market;
- Road infrastructure is not adequate to allow for marketing of animal products;
- Livestock markets do not meet standards for human health protection;
- There is not enough knowledge about EU and Domestic Laws and Regulations with regard to slaughtering facilities, livestock markets, marketing of meat and dairy products in order to guarantee food safety;

#### 5. Recommendations

- It is necessary to establish cooperation between stakeholders responsible for guaranting food safety and human health and animal welfare;
- Veterinary inspectors should permit the sale of meat of animals slaughtered only in licensed abattoirs. Fees for slaughtering animals and meat control should be unified across the country
- Livestock markets should be properly established and in accordance with livestock areas. The transportation of animals should be done by fully respecting animal welfare standards;
- The establishment and functioning of information system for farmers and dealers on livestock marketing and prices of animal products should be followed. In addition,

collection and distribution of information on markets should be established and developed, including standard methods of testing animal and meat qualities. So, prices of live animals and meat products would be in accordance with their qualities. In addition, detailed information on markets would help farmers know better the market demands with regard to characteristics of animals and meat products in order to better adapt the production activity of farms to the market demands;

- Livestock markets should be located in suitable places providing very good hygienic sanitary conditions.
- Construction of public slaughterhouses in all the districts of the country and large tourist areas is more than necessary. There should be established rules that every animal be slaughtered in abattoirs;
- Implementation of animal welfare rules and regulations is necessary.
- Slaughterhouses should meet all the standards with regard to: animal welfare, slaughtering activities, carcass processing, hygienic-sanitary conditions, and water supply.

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