# Livestock development and veterinary assistance in Albania

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#### Introduction

Albania is predominantly a rural society. The sector's contribution to GDP was about 35 per cent before the collapse of the centralised system and reached 55 per cent in recent years, due to the decline in industrial output. Livestock account for about half of the entire GDP agriculture sector. Some 50 per cent of the labour force is employed in agriculture and forestry and two-thirds of the population live in rural areas.

The production of milk, mainly from cows but also from sheep and goats, is the principal focus of livestock production while meat has been mainly the by-product of the dairy sector.

The reforms since 1989/90 have resulted in state farms and cooperative farms being privatized into over 422,000 small farm holdings, each having an average 1.7 ha of land, and an average of less than one adult cow in addition to sheep and goats, chickens and pigs; in total 3-4 LSU (livestock small units) per farm.

Seventy-two per cent of the human population live in the plain areas, i.e. the coastal plain and the districts of Korçe and Devoll. They contain 73 per cent of the arable land, 66 per cent of the milking cows and 60 per cent of sheep and goats. All farms are mixed farms focused on the integration between crop and livestock for family subsistence. Of the little surplus available for the market the main products of value are milk and vegetables.

The former system of extension services, input supply (animal feeds, seeds, fertilizers), and marketing and processing of milk and meat collapsed completely. It is a major challenge to the Government and the emerging private sector to restore and readjust these structures to meet the requirements of the new production system and to exploit the under-utilized potential of the livestock sector.

## The Project

The Italian Government has funded a three-year development project that started in February 1997, to assist the General Directorates of Animal Production and Veterinary Services to develop their sectorial policies. The Istituto Agronomico per l'Oltremare (I.A.O.), a technical institution belonging to the Italian Ministry of Foreign Affairs, was charged with the implementation of project activities (see Figure 1).

The project "Livestock Development and Veterinary Assistance in Albania" (Programma Zootecnico Integrato in Albania) has been divided in three sub-projects:

- a) cattle reproduction improvement,
- b) assistance to veterinary services, and
- c) institutional collaboration in applied research.

The objective of the project is to provide a support for the transition process of the livestock and veterinary sector from a planned economy to a market economy, providing assistance

to the involved institutions, farmers' associations and private operators. The project includes qualified technical assistance, training courses to be held both in Italy and locally, applied research activities, as well as the supply of specific equipment.

## **Cattle Reproduction Improvement**

# Problem to be addressed and project strategies

Until 1989, all livestock was owned by state and cooperative farms, keeping 300 to 1,000 head of cattle. The artificial insemination (A.I.) service was organised through these large units, with usually one A.I. technician per farm. Similarly the genetic improvement scheme relied on these large farms, with minimum performance recording (i.e. quantity and fat percentages monthly).

The bulls to be used in A.I. originated by these state farms, were selected on a pedigree basis and then raised at the only existing A.I. centre in Tirana. After the 1991 political and economic changes, the old A.I. service collapsed. Farmers with small herds could not afford to keep a bull for natural service, and revival and reorganization of A.I. became a necessity.

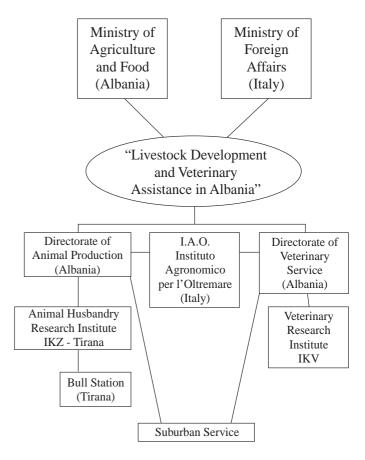


Figure 1. Framework of project.

Some A.I. technicians have rescued the equipment from state farms (mostly liquid nitrogen containers) and have started offering an A.I. service on a private basis at a village level. The coverage, however, is not sufficient and needs to be enlarged at least to the areas where livestock concentration is more important. At present a two-level system is already in place; a centre for semen production in Tirana, and more than three hundred private technicians of artificial insemination (A.I. points) operating in the country.

Between the two levels (Semen Production Centre and A.I. points) the project is building up some intermediary centres that will collect and store semen and liquid nitrogen from Tirana, organizing the distribution to the A.I points. These district centres will also record A.I. activity and, possibly, production data, collecting and validating the information provided by operators.

The staff of the proposed three levels structure will be trained or retrained on various topics, such as semen handling and storage, data collection and processing, A.I. techniques, and selection schemes for genetic improvement.

The project provides the required equipment to the three levels of the A.I. service and contributes to the Government strategy for the privatization of such services by creating 400 new A.I. points.

A cost-recovery policy is being adopted: the sale of A.I. equipment will start a revolving fund suitable for the purchase of other equipment.

## Development objectives

The long-term objective of the project is improved productivity of livestock and increased income of rural small farmers by restructuring and strengthening the public veterinary services and animal breeding institutions, involving at the same time the private sector in the provision of veterinary and animal breeding services at farm level. The immediate objectives are:

- a) reorganization and strengthening of the artificial insemination service adapted to the nearly privatised agriculture,
- b) establishment of an A.I. recording system for improved quality and management of the service, and
- c) preparation of a plan for the implementation of nucleus milk recording scheme first to monitor productivity of dairy cows and later to be used for progeny testing of A.I. bulls.

# **Veterinary services**

# Problem to be addressed and project strategies

In the past, the Veterinary Services within the Ministry of Agriculture and Food have provided technical services to the former large-scale farms (300-1,000 livestock heads); now there is a need to adapt the Services to the present situation (1-4 livestock units per farm), in order to improve animal health.

# Development objectives

The attention is mainly focused on the major zoonoses, i.e. brucellosis, tuberculosis and anthrax, that cause both economic losses in terms of animal production and human suffering among the rural population. The intermediate objective is that the Albanian Veterinary Services should be recognised by the European Union (EU) as being able to

deliver services and guarantees equal to those applied throughout the EU.

To achieve this objective, the following actions are in progress:

- a) strengthening of the Instituti i Kerkimeve Veterinarie (I.K.V.) of Tirana, that produces serum and vaccines used for the main livestock diseases, by supply of scientific equipment, means of transport, informatics equipment, supply of reagent, antigens, vaccine etc, training courses for IKV technician, and specialised technical assistance,
- b) setting up of 5 regional veterinary laboratories,
- c) developing training courses in Italy and Albania for the technical stuff of the Veterinary Services and for private veterinary both at the central and suburban level, and
- d) supplying field programme equipment.

Since there are no functional telephone lines in many districts, the Veterinary Services will be equipped with portable radio transmitters/receivers, to improve the communications among the district labs for the implementation of the zoonoses prophylaxis programme and for the prompt reporting of suspected diseases made compulsory by law. In order to control the most urgent zoonoses it is important to physically identify the animals that have been tested and/or vaccinated..

## **Institutional collaboration in applied research**

#### Project strategies

The Applied Research sub-project is based mainly on the close collaboration between the Zootechnical Research Institute (IKZ) of Tirana and the IAO in Florence. The objective is essentially to help the IKZ identify and carry out the research and to facilitate contacts between the Institute itself and Italian and foreign research institutions operating in the animal production field.

The trials under way so far include feeding of dairy cows during the dry period and the first lactation period, and the effect of a modest nutritional supplement on production and fertility is currently being assessed with Holstein Friesan cows, the optimization of the use of by-products in livestock feeding and the use of straws in livestock feeding.

## Other recent studies include:

- a) assessment of the efficacy of artificial insemination in cows (In a few districts, some A.I. operators are encouraged by the Project to collect data concerning the efficacy of the insemination. These data are then processed in Tirana (IKZ) in order to assess the reproductive performance in cows),
- b) industrial cross-breeding (F1) with beef cattle on small farms (Over the last few years, Albania has almost reached the self-sufficiency as far as milk production is concerned. In contrast, meat production is still stagnant and beef and lamb meat is imported from Greece and Eastern Countries. For this reason milk breeds (Holstein and Jersey ) will be cross-bred with beef breeds (Marchigiana, Piemontese, Limousin) in order to obtain improved F1s. At present it is common practice among farmers to sell calves at a live weight of around 90 kg. The aim is to convince them to

- keep the animals for a longer period, reaching a higher weight at slaughtering and a better quality of carcass),
- c) pig production on small farms (In the predominantly Catholic areas, where pigs are bred, we are trying to safeguard and enhance indigenous breeds which are particularly interesting because they can adapt to any environment),
- d) optimal period for cutting alfalfa (There is a need to take into account the quantity of production aspect and the nutritional value. For this part of the research a quantity of alfalfa was cut and the samples are currently being analysed) and
- e) Socio-economic studies (The prevalent farming systems in some areas of the Country are considered and a cost/income balance of small-scale farms is being analysed).