1 Introduction.

Ethiopia is one of Africa's largest countries, with an area of approximately 1.1 million km²; the population is estimated to be 55 million, with 2.5 million people living in Addis Ababa, the capital city. The country has borders with Eritrea and Djibouti in the north, Sudan to the west, Kenya to the south and Somalia to the east and north-east. Most of the country is highlands rising to 13000 ft, but dropping sharply to the Sudan border in the west and towards the Denakil lowlands in the north-east. The land falls more gently towards Kenya in the south and the Ogaden desert and Somalia in the east. The highlands are divided by the northern end of the Rift Valley, which forms a series of lakes. The climate is temperate on the plateau but hot in the lowlands. The main primary products are wheat, barley, maize, sorghum, millet, coffee, cotton, sugar cane, beans and peas, cattle, timber and salt, whilst the main exports are coffee, hides and skins, beans, cotton and sesame seeds. Unfortunately, drought is common and frequently leads to famine.

Livestock holds the key to sustainable agricultural development and to improving the cash income of the majority of Ethiopian farmers. Apart from that, livestock also provides fuel, clothing and traction power, and animal agriculture is the key factor in food security in the dry areas, where it is the predominant economic activity. In general, the livestock sub-sector is considered the most important in the country, with some 28 million cattle, 23 million sheep, 17 million goats, 7 million equines and 1 million camels. The income from these represents 15% of the country's GNP. About 70% of the livestock are raised in the highlands mixed agricultural system, while the remaining 30% are found in the various grazing systems in the lowlands.

Livestock productivity is low, being most often below the known average for Africa. The most important obstacle to increasing animal production in Ethiopia is still the occurrence of diseases. This is especially true for highly contagious diseases such as Rinderpest and Contagious Bovine Pleuropneumonia (CBPP). Ranking equally as an obstacle in this respect is inadequate nutrition. Improvement in both situations are very much dependent upon the availability of good veterinary and extension services.

2 Rabies occurrence and control.

Urban rabies is essentially maintained by dogs wherever it is endemic world-wide. It is a problem of veterinary public health importance because of the relationship which exists between man and animals. Regardless of whether or not rabies is present in wildlife reservoirs, over 90% of human deaths from rabies are caused by dog bites. Therefore, if we control dog rabies, we will prevent human rabies. In Ethiopia rabies is one of the most feared zoonotic diseases. It is generally understood that rabies cannot be cured even by highly reputed herbal medicines. As a result of this there is an awareness of the disease both in rural and urban areas. It is estimated that the dog/human population is 1:6 in urban areas and 1:8 in rural areas.

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Rabies is reported in all regions of Ethiopia and the incidence in humans reported from hospitals and health centres is alarming. In Addis Ababa in three hospitals alone, 2031 persons were reported to have received anti-rabies therapy (post-exposure treatment) in one year. In the following year, 1838 were treated. Recent data will be presented later at this conference by Dr. Makonnen Fekadu.

At present, the Institute that is carrying out diagnosis and vaccine production against is the Ethiopian Health and Nutrition Research Institute (EHNRI). The production capacity is small and the production technology of the Institute is outdated. The Ministry of Agriculture plans to start the production of anti-rabies vaccine for animals using the most recent technology.

3 REPORTING.

The occurrence of animal rabies is reported to the veterinary clinics, which fill in the monthly reports of disease occurrence and vaccination and send them monthly to the Veterinary Department.

4 ANIMAL RABIES CONTROL.

Vaccination is carried out by city councils in urban areas. In rural areas, vaccination is carried out by the Veterinary Services Department in response to outbreaks. In Addis Ababa, dog owners take their dogs to vaccination posts where vaccine is provided. The vaccine is available at the EHNRI at a cost of US$ 0.15cents/dose.

The vaccine used for rabies control in dogs is inactivated nerve tissue vaccine (NTV). To reduce the dog population, stray dogs are being killed (but irregularly) by the city councils. When the Ministry of Agriculture commences vaccine production the rabies control programme will be handed over to the Ministry of Agriculture and the programme will be executed by the Veterinary Departments.

5 PROPOSED RABIES CONTROL ORGANISATION.

The Veterinary Department has a well established network; the services reach down to the grass roots. The clinics are equipped with cold-chain and other equipment They carry out disease control and render clinical services. When the rabies vaccination programme is started by the Ministry of Agriculture, they will be also provided with other necessary field and camping equipment.

The Pan-African Rinderpest Campaign project operates through a system of Branch Co-ordinating Offices (BCOc) where the project owns the equipment but the staff is supplied by the regional states The BCOs have proved to be an effective method of coordinating infectious disease control where the federal and regional states collaborate to implement the programme The BCOs can also co-ordinate other disease control programmes.