CHRONICLE

The following scientists have participated in the teaching programme of the Veterinary School, of the University of Dar es Salaam, in the period January - April 1979

1. Dr. David Broderick - Galway - Ireland - parasitology
2. Dr. Ernest Hirsch - Dublin - Ireland - pathology
3. Dr. Hans Bürger - Hannover - West Germany - parasitology
4. Professor A. Roger Akester - Cambridge - Great Britain - anatomy.

Inaugural lectures delivered in the period October 1978 - March 1979

1. The development and tasks of Veterinary Sciences - Professor Richard Tucker
2. Potentials and limitations of biological nitrogen fixation studies in East Africa - Professor M.S. Chowdhury
3. Agricultural sector analysis as a guide to the development of the agricultural policy - Professor R.S. Foote
4. The engineers contribution to the development of the agricultural production system - Professor Frank Inns
5. The role of goats in the agricultural development - Professor Martin Kyomo
6. Forestry research in Tanzania. Problems and probable solutions - Professor G.S. Klem

The following publications by the Division of Forestry are presently available.

1. Planning of sawmilling industry in Africa: Possible sources of energy, by Gustav S. Klem. Record no. 1, 1978.
2. Preliminary evaluation of the Taungya system for combined wood and food production in North-Eastern Tanzania, by Ole Hofstad. Record no. 2, 1978.
3. Basic density and its variation within and between trees of pine *(Pinus patula)* and cypress *(Cupressus lusitanica)* in the Meru Forest Project, by Christopher N. Lema, Masonic M. Kitali and Gustav S. Klem. Record no 3, 1978.
4. Yield, quality, cost and market acceptability of charcoal from softwood slabs, by Romanus C. Ishengoma and Gustav S. Klem. Record no. 4, 1979.

Research

The Division of Veterinary Science (Faculty of Agriculture, Forestry and Veterinary Science), the Department of Zoology (Faculty of Science) and the Regional Livestock Development Office Morogoro (Regional Development Director's Office) have undertaken the research projects entitled: "The Fauna of Ulugulu Mountains and of Morogoro Valley as a possible source of transmissable diseases".

Objectives of the project:

1. To find composition, and to learn about biology of the local Fauna
2. To study the nature of its diseases and the ways in which these diseases are transmitted
3. To explore interactions between this Fauna and the domesticated stock, including man
4. To outline the appropriate preventive medical measures.

Ecological and pathological interactions between the free living and domesticated animals are a characteristic feature of all tropical medicine, and the effective control of economically important species and breeds is possible only if these ties are known and considered. Here the stories of rabies, TB, tick and fly borne diseases or those of parasitic infestations offer some suitable examples.

It is thought, both scientifically sound and economically profitable, to organize the work of many researchers around one of the basic and important problems. In this way the integration of informations can be obtained and thus some solutions reached.

It appears that the composition, diseases and pathogens of the local Fauna were not studied.

The whole study will start with the securing of the supply of animals. These will be trapped and brought to the laboratory alive. The trapping will cover areas of forest, mountains, plains, bushes as well as the cultivated locations.

The area from which specimens will be collected covers a streach of land on both sides of the Morogoro Campus and of the Farm. At least six different locations will be selected and trappings are planned for different seasons of the year. A particular attention will be given to Rodents and Carnivores.

In the first stage the laboratory work will comprise of the following studies:

a) Taxonomy
b) Ectoparasites
c) Blood parasites
d) Taxoplasmosis
e) General Pathology
f) Trypanosomiasis
g) Oviduct and Reproductive system
h) Digestive problems
i) Respiratory system (normal and diseased)
j) Dermatology
k) Comparative morphology.

The variety of methods will be used in accordance with the requirements of a specific topic. In main the taxonomical studies will involve the comparison and description of the coat, skin and that of the cranial features; Ectoparasitological investigations will be based on the study of morphology of the parasites and that of the methods of feedings; Research on blood parasites will be carried on by using the blood smears and microscopical methods; *Trypanosomiasis* will be studied in blood samples and in pathological changes in the body such as those in the spleen and lymph nodes; *Taxoplasmosis* by histochemical methods and by investigating the stools; general pathology by application of histopathological methods; Oviduct in histological sections; Respiratory system through medical examination, and the techniques dictated by the problems selected; Digestive system through the stomach content, and changes within the glands. A particular attention will be given to the deficienty syndroms; Dermatology by histological methods and if possible also by the electromicroscopical methods; and comparative morphology by dissection, microscopic techniques and macerations according to the feature investigated.

The duration of this project is indefinite, however, the collection of the material is expected to be completed within 2 years, counting from the beginning of the trapping. The start of collecting will depend on the time needed to obtain traps and cages.

The bulk of collecting should be completed within 2 years, thus allowing for coverage of 2 wet and 2 dry seasons as well as for that of 2 rotations of crops in the cultivated areas. The latter could be an important ecological factor. The 2 years period also provides for confirmation of the density of the animal population in any given areas.

The studies, which employ the histological, morphological, taxonomical and analytical techniques, can be carried on simultaneously, so that by the end of this period some topics can be outlined and first conclusions reached.

It is assumed that by this time more specific problems will emerge and that these problems will receive a special attention. Such specifity could be based on economic factors (for instance severity or frequency of pathogens) or on technical factors (such as the techniques or the equipment available). Consequently the basis of investigations could be narrowed.

Some results could be only indicative and therefore further material (samples) may be needed.

This project is an attempt to provide a basis of an important and far reaching common problems for the scientific activities of the Veterinary Division so that such activities may complement each other for a considerable period. It is invisaged that in the third stage the general summary of the results obtained could be made and the practical measures devised. New lines of activities may emerge.

It is expected that the significance of the results achieved will be twofold. Firstly the research and separate projects can contribute to the knowledge of an biologically and medically important area; and secondly that the concentration of research on different aspects of a core problem allows for a better systematization and integration of the knowledge obtained, thus providing more possibilities for achieving insight as well as the solutions of problems.