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THE FAO TECHNICAL PAPERS

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Preface

African Animal Trypanosomiasis

The World Food Conference in 1974 called upon FAO "to launch as a matter of urgency, a long-term programme for the control of African animal trypanosomiasis as a project of high priority". Accordingly, in 1975 FAO initiated the *Programme for the control of African trypanosomiasis and related development* to which very high priority was given. Subsequently, the 10th FAO Regional Conference for Africa held in 1978 confirmed the mandate given by the World Food Conference to FAO.

A five-year preliminary phase of the Programme, in which the necessary technical and administrative structures at international, regional and national levels were to be set up, prior to the development and operation of large-scale projects, is now nearing completion.

The organizational structure worked out will ensure the participation in the Programme of all interested Member Nations and Associate Members of the Organization in Africa, the close association of international organizations and agencies in and concerned with the Programme (especially its financial implications) and adequate technical and administrative support.

Although documents refer to the "FAO Programme", the Programme is, in fact, of and for the African countries and FAO's role is primarily one of coordination in which the Organization will rely heavily on the cooperation and collaboration of OAU, WHO and other organizations.

This means that those African countries wishing to adopt and support the Programme can best do so by initiating discussions with FAO in order to indicate the types of assistance they will be requiring under the Programme.

An indication of the magnitude of the problem of trypanosomiasis in Africa may be gained from the vast area of land, estimated at some 10 million km² (a third of the African continent) that is affected. Both humans and animals in this area are affected by this parasitic disease, the causative organism of which, the trypanosome, is transmitted by the tsetse. Of the total area affected some 3 million km² are covered by equatorial forest. Much of the remaining area is suitable for either livestock or crop production since it contains some excellent grazing land and large areas of good, virgin agricultural land. This is largely because it has been "protected" by the tsetse from the results of overgrazing and intensive, short-term agricultural exploitation.

Because the need to accelerate pastoral development and to bring more potential farmland into production is becoming increasingly urgent in a number of countries, these are now intensifying their efforts to control the tsetse and trypanosomiasis. The task, however, is so great that coordinated, external technical and financial assistance is essential if these objectives are to be achieved.

While it is hoped that national tsetse and trypanosomiasis control units will be established by those countries that attach importance to the Programme, FAO believes that emphasis has to be placed not only on unilateral tsetse and trypanosomiasis control, but on area development as well. This involves evaluation of agricultural and livestock potentialities and adequate land-use planning of areas to justify the initiation of control measures. Such comprehensive development will help to ensure that the outcome of projects will be successful area and community development rather than the mismanagement of resources freed from tsetse infestation.

Experience in Africa has clearly shown that land use is implicit in the problem of tsetse and trypanosomiasis control and that the costs of the development of land after control has been achieved are likely to be immeasurably greater than the cost of the control of the tsetse itself.

It is most desirable, therefore, that evaluation of the potential resources of an area should precede, or at least accompany, studies of the tsetse that are to form the basis of control plans. Trials to test field control techniques, assessment of stock-carrying capacities,

potentialities for water development and irrigation and crop production, etc. have also all to be undertaken before comprehensive or phased area-development can be initiated.

FAO has assured interested governments that it will provide preparatory assistance missions for the purpose of advising them on the formulation of policies, programmes and projects aiming at land resource development parallel with progress made in achieving tsetse control.

Governments will, therefore, need to evaluate their plans for the development of areas scheduled for control of tsetse, taking into account national development plans. For this purpose they are being urged to establish national trypanosomiasis control units and to assess their needs in the training field.

In implementing plans for area development and tsetse and trypanosomiasis control under the Programme, FAO is fully conscious of the need to avoid taking any action that may have irreversible, adverse effects on the environment. In rendering advice to governments it will continuously keep this fundamentally important principle in mind.

Trypanosomiasis and tsetse control methods have been greatly improved during the last 25 years and several of these have been applied effectively and economically. These include the use of trypanocidal drugs, vector control by ground aerial spraying of *insecticides*, and selective removal of vegetation forming the habitat of the tsetse. In recent years growing interest has also been shown in the potential use of trypanotolerant livestock as a means of allowing more efficient land utilization in tsetse-infested areas. In addition, research is at present being carried out on the release of sterilized insects and the immunization of livestock.

A series of articles on African animal trypanosomiasis have appeared previously in the *World Animal Review*, a quarterly journal on animal health, production and products published by FAO.

The present publication offers a complete collection of these articles.