



**THE PROGRAMME AGAINST AFRICAN TRYPANOSOMIASIS**

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**3rd MEETING OF THE PROGRAMME COMMITTEE**

**REPORT**

**Geneva, Switzerland**

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**Food and Agriculture Organization of the United Nations  
African Union / Inter-African Bureau for Animal Resources  
International Atomic Energy Agency of the United Nations  
World Health Organization of the United Nations**

## **Foreword**

The third meeting of the Programme Committee (PC) was convened at the Headquarters of the World Health Organisation (WHO) in Geneva, Switzerland. The main objectives of the meeting were to provide advice and guidance to the Programme Committee on priority areas for further research, to make recommendations on key policy and technical issues through the presentation of position papers and to co-ordinate and prioritise disease control activities in Africa for a more effective delivery in the context of human welfare and food security through more productive mixed crop-livestock systems.

The meeting was chaired by Professor P. Holmes with the assistance of Dr. K. Katondo as co-chairman. The agenda of the meeting is attached as Annex I. The meeting was attended by twelve members of the Programme Committee (representing a number of Donor Organisations, International Research Institutes and African Member States). In addition, six invited technical advisors and nine members of the Joint Secretariat attended the meeting. The list of participants is attached as Annex II.

The meeting was opened by the Assistant Director General of the WHO, Dr. R. H. Henderson. The Assistant Director General stressed the importance of the PAAT initiative for improving the co-ordination and prioritisation of all efforts to control Trypanosomosis in Africa.

### **Matters arising from minutes of last pc meeting**

The previous PC meeting was held at FAO Headquarters, Rome, Italy in December 1996. This concluded by proposing eight recommendations. The progress made towards the successful execution of these recommendations was reviewed.

- The logical framework of the PAAT was compiled during a management planning meeting in Montpellier, France in April 1997. A comprehensive project planning matrix was developed including objectively verifiable indicators, means of verification and assumptions (see section 4).
- Improved communications through electronic mail links between technical/scientific advisors and focal point liaison officers needs more attention, especially in West and Central Africa. It was noted that electronic mail connections in Southern Africa have been installed through the assistance of the RTTCP.
- With regard to the production of position papers it was noted that four papers are well advanced and two are in a preliminary stage of preparation (see section 5).
- The list of research priorities as prepared by the various advisory groups was reduced to a more manageable number (see section 6.1).
- The Secretariat was requested to co-ordinate the collection of geo-referenced data. A consultant has been requested to define the role of an information system, to determine the functional requirements and to outline a proposal for system development. As a result of this report the data information system for animal Trypanosomosis will be developed within FAO over the next two years with the support of DFID (see section 8.1).

- The production of an internet website has not yet been initiated.

## **Secretariat progress report**

### **WHO**

An information system has been developed using geo-referenced maps of human sleeping sickness incidences. The majority of the participating programs have received a computer equipped with electronic mail facilities. The PAAT was officially endorsed during the General Assembly of the WHO in May 1997.

### **FAO**

Endorsement of PAAT was obtained during the 29th Session of the FAO Conference. At the same time a new statutory body was established: the "Panel of PAAT Advisory Group Co-ordinators". Structural adjustments to the programme are being considered to ensure the closer integration with the Liaison Officers network. Publication of TTIQ has continued satisfactorily with contributions to costs being received from DFID, the Joint FAO/IAEA Division and RTTCP.

The field guide on Trypanosomosis is being revised and will be published in English and French in 1998. Various meetings were organised such as one for the Advisory Group Co-ordinators of PAAT and two meetings for the FAO Liaison Officers. Moreover, progress was made with the collection of national data on human and financial resources allocated to Trypanosomosis control and research. Finally, a questionnaire was prepared and sent to all countries infested by the tsetse fly. The questionnaire yielded more than a 60% response.

### **OAU/IBAR**

OAU/IBAR reported the results of the 5th Ministerial Meeting organised in Swaziland from 4-8 August 1997. The participants recognised the need for continuing tsetse and Trypanosomosis control in the region in a co-ordinated fashion.

A preliminary report was circulated of the 24th meeting of the ISCTRC held in Maputo, Mozambique, from 29 September to 3 October 1997. The meeting was very well attended (by 284 participants) partly due to the fact that a number of other meetings were organised at the same time in order to coincide with the ISCTRC meeting. PAAT organised the Advisory Group Co-ordinators meeting, FAO convened a FAO Liaison Officers meeting, the IAEA organised a Research Co-ordination meeting and WHO organised a meeting of the regional officers. In addition, RTTCP convened a regional standing committee meeting and OAU organised a training programme on project management.

The Regional Co-ordination Unit of the EDF funded project on Farming In Tsetse Control Areas of East Africa (FITCA) will be based at the OAU/IBAR office in Nairobi. The office will assist national bodies of the four countries involved in the implementation of the programme (Ethiopia, Kenya, Uganda and United Republic of Tanzania).

### **IAEA**

During the past year a French version of the Programme Memorandum was published. In addition, financial assistance was provided to enable the publication of the TTIQ. A

total of sixteen African scientists were supported to attend the 24th ISCTRC meeting in Maputo, Mozambique, in September 1997. During this meeting the PAAT position papers were presented. The focal officer was fully involved in the routine affairs of the Secretariat and served as co-ordinator of the Advisory Group for Diagnosis of Animal Trypanosomosis.

### **Matters arising from the management planning workshop**

The list of outputs and activities as compiled during the management planning workshop held in Montpellier from 7-10 April 1997 was discussed.

- Initially, the donors requested PAAT to compile a list of research priorities in the field of animal and human Trypanosomosis control. Since the management planning workshop, progress has been made with the identification of the research areas and with prioritisation (see section 6.1).
- A position paper was prepared to raise the awareness of the impact of Trypanosomosis and the benefits of control (see section 5).
- The mechanisms of communication with NGO's are well developed in human Trypanosomosis, since only a handful of NGO's are involved. However, in the field of animal Trypanosomosis the mechanisms of communication are not so well developed, mainly because many more NGO's are involved. The FAO Liaison Officers will form the most appropriate link with the NGO's involved in animal health activities in each Member State.
- A data base was developed by WHO including geo-referenced information. WHO also compiled a data base of partners in the developing world. FAO will initiate an information system with financial assistance from DFID (see section 8).

### **Matters arising from the ISCTRC/Advisory group co-ordinators meeting**

1. A detailed report was prepared of the Advisory Group Co-ordinators meeting in Maputo. The report includes summaries of the five position papers presented to the scientific community during the ISCTRC meeting. These were the following:
2. Sustainable integrated disease management for the control of African animal Trypanosomosis.
3. Drug management and parasite resistance in animal Trypanosomosis in Africa.
4. Impacts of Trypanosomosis on African agriculture
5. The implementation of odour bait techniques for the control of tsetse flies in Eastern and Southern Africa.
6. Incorporating socio-cultural factors into tsetse control and assessment of its impact.
7. Privatisation of tsetse and Trypanosomosis control in the tropic

Some outstanding matters from the Maputo meeting were discussed and, where possible, are related to the agenda heading in the report of the Advisory Group Co-ordinators meeting.

Agenda item 2 (on page 14 of the report): Difficulties with communication in West Africa are still prevalent. However, all FAO country representatives have an electronic mail facility. In addition, WHO has distributed 16 computers with e-mail facility in the region. Nevertheless, it was felt that resources should be made available to improve communications particularly in West Africa.

Agenda item 3 (on page 14 of the report): Similarly, it was felt that assistance should be provided for Co-ordinators of Advisory groups in West and Central Africa to attend meetings. Agenda item 4 (on page 14 of the report): The compilation of a resource inventory has been hampered by a poor response rate. In order to improve the response rate it should be stressed that providing information is a two-way process for scientists and should be advantageous for both parties involved.

Agenda item 6 (on page 14 of the report): It was noted that funding of the Pesticide Resistance Reference Centre has been discontinued. It was suggested that the principal scientist of the Centre, Dr. F. Thullner, should contact FAO and WHO to provide technical information and to assess the possibilities to include some activities in the new EDF assisted programme for rural development in Southern Africa.

Other recommendations from the Maputo meeting (as mentioned on page 15 of the report) are dealt with in more detail below (see sections 6.2, 6.3 and 7.3).

Matters arising

### **Research priorities**

As a result of previous meetings two lists of research priorities have been compiled: (1) by the Co-ordinators of the Advisory Groups, which are mostly researchers or policy makers; (2) by the FAO Liaison Officers of Eastern and Southern Africa, which are mostly implementers of control activities. Both groups ranked the research priorities according to importance, which resulted in a greatly reduced list. It was recommended that the FAO Liaison Officers of Western and Central Africa prepare a similar list.

It should be noted that the existing list of research priorities mostly concerns subjects dealing with animal Trypanosomosis, since it is difficult to prepare a list of research priorities for human Trypanosomosis. The Secretariat will combine the three lists into a single one without ranking of the items according to importance. Furthermore, the Secretariat was requested to take into account common themes as well as the recommendations of the ISCTRC meeting.

### **Position papers**

PAAT commissioned a number of position papers to provide policy and strategy directives for various controversial or insufficiently researched subject matters. The papers produced so far have succeeded in an excellent way in elucidating the subject or in provoking debate. However, it was felt that other authors should be invited to contribute in order to address the subjects in a more objective manner and to broaden

the subjects in order to include all techniques. At present the position papers are "working papers". By including other authors and covering opposing views in the discussion section of the manuscript such a revised paper can be endorsed (and published) as a PAAT position. Individual authors may publish the "working paper" under their own name, but without PAAT endorsement.

During the meeting a position paper on privatisation of tsetse control was presented by Dr. G. Lako. It was noted that tsetse control is primarily a community problem not directly benefiting the individual farmer and therefore complicating privatisation. However, some aspects of tsetse control could be privatised. The meeting suggested to include aspects of training, commercialisation and intellectual property in the position paper. In addition, aspects of the privatisation of human sleeping sickness should be mentioned.

Dr. B. Swallow presented a position paper on the impact of Trypanosomosis on African agriculture. The meeting was impressed by the quality of the paper, but suggested that it should include more locations, extrapolate beyond case studies and include some geographic information system applications.

### **Chemotherapy of human Trypanosomosis**

It was noted that the recommendation of the Maputo meeting on a transdermal delivery system was not appropriately worded. The recommendation was discussed and amended to read as follows: The lack of drug development, the limited access to eflornithine and the uncertainty of continued melarsoprol manufacture are matters of public health concern. While research and development for new drugs should be encouraged, new treatment schedules, possible drug combinations and other novel approaches such as alternative drug formulation to treat sleeping sickness should be more fully evaluated to improve the weak tolerability of existing treatment protocols.

### **The relationship between ISCTRC and PAAT**

The ISCTRC and PAAT complement each other and wish to move forward together. ISCTRC is an ideal forum for field workers and scientists to present their results and share their experiences. Thus, ISCTRC can promote PAAT within the African scientific community. However, it was felt that the collaboration between ISCTRC and PAAT including international organisations could be strengthened.

### **The global approach**

Prof. Dr. I. Maudlin presented an example of a highly successful campaign to control Chagas disease in South America, the Southern Cone Initiative (SCI). The success was mainly due to a unified and properly co-ordinated approach. The presentation identified the shortcomings of the present tsetse control activities and pointed the way forward to autonomous Trypanosomosis control. It was stressed that integrated disease control, identification of geographic priority areas, scientific consensus, political promotion, public awareness, self reliance and community participation will all play an important role if tsetse and Trypanosomosis control is going to emulate the success of the SCI.

## **Workshops**

The PAAT should suggest topics for workshops to refine the research priorities and assist in the organisation of thematic meetings. The various donors stressed that on-farm research assisting field projects, strengthening the researcher-farmer linkage and promotion of a participatory approach are some of the objectives of funding agencies. A workshop should be organised to stimulate the integrated approach to rural development including integration of vector/parasite control. Attention should be focused on household resources security and peri-urban production systems.

Anticipated projects dealing with Trypanosomosis

## **Farming In Tsetse Control Areas of Eastern Africa (FITCA)**

The FITCA project will start in 1998 focusing on food security and poverty alleviation in Uganda, Tanzania, Kenya and Ethiopia. The control of human and animal Trypanosomosis will feature prominently within the project. The project is budgeted for ecu 20 million, which will be provided by EDF over a four-year period. The co-ordination of the project will be by OAU/IBAR. At present, strategy papers have been developed for three of the countries. It is anticipated that a similar project will be initiated in West Africa with support from EDF. The representative of DG VIII, Mr. M. Dale, proposed that a specific budgetary element will be reserved in the EC funded Regional Programmes for the involvement of PAAT, particularly with regard to aspects of institutional development and policy and strategy definition.

## **Feasibility project for tsetse eradication in the Southern Rift Valley of Ethiopia**

In a presentation by Mr. U. Feldmann of the Joint FAO/IAEA Division the success of the tsetse eradication programme in Zanzibar was highlighted and the concept of integrated area wide insect pest management approaches was explained. Furthermore, it was suggested to retain the option of tsetse eradication wherever feasible and justifiable and a briefing was given on the phased, conditional approach regarding the integrated Sterile Insect Technique (SIT) programme in the Southern Rift Valley of Ethiopia. At present the project is budgeted to cost US\$ 43.8 million for the eradication of *Glossina pallidipes* from an area of 25.000 km<sup>2</sup> over a ten-year period.

Following considerable discussion the Programme Committee expressed concerns over the economic and technical feasibility of the proposed project in Ethiopia and questioned the justification for eradicating tsetse from the Southern Rift Valley of Ethiopia. Moreover, two members of the Programme Committee (representing EDF and IFAD) requested the PAAT Secretariat to examine the situation in more detail in order to provide further advice and guidance to its suitability for funding. It was suggested that this could take the form of a commissioned position paper on SIT but in view of the expediency required may also be done through an internal review and assessment using the expert resources available to PAAT.

The position paper or the review should provide in detail the requirements needed for successful eradication, indicate measures necessary to reduce fly population, advantages and disadvantages of intensive tsetse population reduction, sustainability and a cost/benefit analysis. Once prepared and discussed, PAAT will distribute the document to the Member States and to donors, regional organizations, development institutions and agencies.

## **Concerted action programme for Trypanosomosis**

A project proposal has been submitted to EU DG XII for funding. The project will coordinate research activities in Trypanosomosis and will be closely integrated with PAAT's objectives.

### **Information system development**

#### **Development of the FAO/PAAT information system**

Development of the FAO/PAAT information system was initiated. This will consist of three components: a resource inventory, a knowledge base and a geographic information system (GIS). Funding has been provided by DFID for a Technical Officer to develop the system during the next two years at FAO, Rome. It was decided that an inventory of field stations and training opportunities be compiled. Moreover, it was suggested that PAAT compile individual country profiles with the assistance of national counterparts. This information should form part of a database, which would be available to planners or donors involved in project initiation. The three aspects of the information system will strengthen the role of PAAT as an advisory body to national governments and international donors.

#### **Presentation of an information system for human Trypanosomosis**

A demonstration of a CD-ROM on human African Trypanosomosis was given to the meeting. The CD-ROM will be available for distribution by the end of 1998 and will be updated annually. An initiative of the WHO/UNICEF Joint Programme of the Division of control of tropical diseases to apply GIS in the area of public health was demonstrated. In particular the applications for mapping human sleeping sickness were shown.

### **Plan of action**

A proposal was presented for a five-point action plan for the control of Trypanosomosis. Since the epidemiological characteristics of human and animal Trypanosomosis are very different it was decided to prepare two separate action plans. Human sleeping sickness tends to be focal and occurs in epidemics, while animal Trypanosomosis is mostly endemic and diffuse. However, it was stressed that an integrated approach to disease management and rural development is essential. During the discussion it was agreed that the focus of the action plan should be on mixed crop/livestock systems since tsetse control in these areas will achieve the biggest economic benefits. It was suggested that the evaluation group of the CGIAR should be consulted for advice. Moreover, the work programme for the future design of the RTTCP in Southern Africa can provide a focal point for some aspects of the action plan.

### **Plan for animal Trypanosomosis**

The PAAT can enhance returns to investments in Trypanosomosis control by empowering national and regional centres to better link research and development to the



planning, implementation and evaluation of control strategies for animal Trypanosomosis. A five-point action plan was adopted for animal Trypanosomosis:

- Agree on criteria for prioritizing areas for investments in control in order to promote improvements in human welfare through more productive mixed crop-livestock systems.
- Support priority setting exercises at the national, regional and continental levels in order to identify areas that should be given highest priority for investments in Trypanosomosis control.
- Develop guidelines for control strategies in high, medium and low priority areas in terms of: (a) integration of parasite and vector control; (b) roles for governments, private firms and farmer groups; (c) contributions from intended beneficiaries; (d) phasing of activities; (e) accompanying development activities and policy changes.
- Agree on criteria for evaluating investments in Trypanosomosis control.
- Develop indicators for those criteria and means of verification that can be easily incorporated into national and regional systems of monitoring and evaluation.

### **Plan for human Trypanosomosis**

It is important to distinguish between the problems associated with the control of sleeping sickness (SS) and the control of trypanosomiases in domestic livestock. There is evidence that SS epidemics tend to reoccur in a number of disease foci that are confined to particular locations. Epidemics can occur in those foci if the fly-human contact increases rapidly (*Trypanosoma brucei rhodesiense*) or if surveillance systems fail.

The action plan for human Trypanosomosis is based on 12 points agreed upon by representatives of the 16 most endemic countries at a meeting for the coordination of human African Trypanosomosis control held in Abidjan in May 1996. These points received support from representatives of Government agencies and involved NGOs who were present in Abidjan:

1. Establishment of an epidemiological monitoring and information system;
2. Mobilize resources;
3. Extend coordination of control activities;
4. Develop action plans at national level;
5. Standardize strategies, methods and protocols used in disease control;
6. Implement training;
7. Develop material for information, communication and education;
8. Collate and disseminate documentation;
9. Establish reference laboratories;

10. Provide material assistance (revolving fund);
11. Promote operational and field research;
12. Develop coordination of activities concerning human and animal diseases.

## **Conclusion**

1. The recommendations of the Advisory Group Co-ordinators meeting in Maputo were endorsed with the exception of the recommendation dealing with the treatment of human Trypanosomosis, which should be broadened.
2. The meeting noted with satisfaction the ongoing developments with the data information systems for human Trypanosomosis as developed by WHO and for animal Trypanosomosis as developed by FAO/PAAT with the financial support of DFID. The two systems will be compatible and complementary.
3. Agreement was reached to modify the Programme Committee to include additional donors as well as African decision and policy makers. Moreover, it was proposed to increase the number of African members functioning as Co-ordinators of Advisory Groups and to incorporate the FAO Liaison Officers as active participants in the PAAT structure.
4. Agreement was reached that PAAT should be consulted by representatives of donors, national governments and international organizations involved in funding and implementation of intervention campaigns. The consultation should involve all aspects of strategy planning, assessment of disease or vector control options, project design and evaluation. Projects for evaluation should be sent to the PAAT Secretariat, who in consultation with the Chairman, will distribute them to international experts for comments. These comments will be collated by the Secretariat in consultation with the Chairman and distributed to interested parties.
5. Support for workshops on selected topics should be initiated and organised through PAAT in collaboration with relevant organisations.
6. The three lists of research priorities should be cross-matched and common themes should be selected without ranking. The list of research priorities will be made available to the donor community.
7. The position papers should be developed further and agreement should be reached with regard to publication. Special multi-author versions should be prepared, which reflect diverging views or alternative techniques and can be endorsed by PAAT.
8. A five-point action plan was adopted by the Programme Committee. The action plan prioritises the control of African animal Trypanosomosis in high potential crop/livestock systems. The Secretariat will have to initiate implementation of the action plan and identify the necessary resources.
9. PAAT should start to develop guidelines on available control technologies, highlight their advantages and disadvantages and indicate the criteria to be considered in order to obtain maximum economic benefit.

10. The action plan for the control of African human Trypanosomosis as initiated by the WHO was endorsed.
11. It was agreed that efforts should be made to increase the public profile of PAAT. It is proposed to produce a two page glossy brochure which describes the multilateral initiative, primary objectives, membership, functions, principal activities and services available. This brochure should be distributed to governments, regional organizations and donors. The services include the unique knowledge base of PAAT, its ability to offer impartial opinions, its internationally-based experience and expertise and the assistance it can give in identifying relevant specialists in the field of tsetse and Trypanosomosis. In addition, a commentary should be prepared for a renowned scientific journal with a large circulation. Finally, the Council of Ministers of the OAU should be provided with the recommendations emanating from PAAT.
12. The meeting noted with interest the comments by the representative of EDF that in future the research priorities of DG XII are to be much more closely linked to projects supported by DG VIII.

**Abbreviations:**

CGIAR= Consultative Group on International Agricultural Research

CIRAD= Centre de coopération Internationale en Recherche Agronomique pour le Développement

DG= Directorate General of the European Economic Community

DFID= Department For International Development

EDF= European Development Fund

EMVT= Département d'Elevage et de Médecine Vétérinaire des pays Tropicaux

EU= European Union

FAO= Food and Agriculture Organization

FITCA= Farming In Tsetse Control Areas of Eastern Africa

GIS= Geographic Information System

GTZ= Deutsche Gesellschaft für Technische Zusammenarbeit

IAEA= International Atomic Energy Agency

IBAR= Interafrican Bureau of Animal Resources

ICIPE= International Centre of Insect Physiology and Ecology

IFAD= International Fund for Agricultural Development

ILRI= International Livestock Research Institute

NGO= Non-Governmental Organisation

OAU= Organisation of African Unity

PAAT= Programme to clarify and solve the problem of African Trypanosomosis

PC= Programme Committee

RTTCP= Regional Tsetse and Trypanosomosis Control Project

SCI= Southern Cone Initiative

SIT= Sterile Insect Technique

SS= Sleeping Sickness

TTIQ = Tsetse and Trypanosomosis Information Quarterly

WHO= World Health Organisation