



THE PROGRAMME AGAINST AFRICAN TRYPANOSOMIASIS

**REPORT OF THE FOURTH MEETING OF THE
PAAT PROGRAMME COMMITTEE**

Vienna, Austria

25 - 27 November 1998

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

Foreword

The fourth meeting of the PAAT Programme Committee was convened at the Headquarters of the International Atomic Energy Agency, Vienna, Austria, from 25 to 27 November 1998. Discussions placed emphasis on the identification and endorsement of a five point action plan for trypanosomiasis/tsetse control. This plan would then give the focus required for the investment of resources in accordance with the objectives of improving human welfare and facilitating the development of mixed farming and sustainable agriculture in areas offering the most promising potential.

The meeting was opened by Mr. J. Hendrichs who, on behalf of the Director of the Joint FAO/IAEA Division, welcomed participants whilst also recommending that the meeting consider a more aggressive area wide approach to tsetse control, based on the justification of the considerable constraint trypanosomiasis continues to impose on rural development over much of Africa.

The meeting was Chaired by Professor P. Holmes with Mr. K. Katondo as vice Chairman. The meeting Agenda is attached as Annex 1.

1. INTRODUCTION

The objective of meetings of the PAAT Committee is, on the basis of technical and scientific advice forwarded from the Advisory Group Co-ordinators and the Liaison Officers, to provide the focus for collaborative efforts to alleviate trypanosomiasis in Africa. Discussions at the current meeting were largely devoted to matters arising from the meeting of the PAAT Advisory Group Co-ordinators convened in Zimbabwe, October, 1998.

The meeting agenda is attached as Annex 1. and a summary of the proceedings, conclusions and recommendations are recorded below.

2. MINUTES OF LAST MEETING AND SECRETARIAT PROGRESS REPORT.

The report and recommendations of the Third Programme Committee Meeting, Geneva 1997, were considered and approved.

Progress report

Since the last meeting the following progress has been achieved in the furtherance of the aims and objectives of the Programme, it being noted that the outputs achieved are to a large extent dictated, and to an extent restricted, by the resources available to the secretariat:

The PAAT Advisory Group Co-ordinators meeting has been given Statutory Body status, as resolved by FAO Governing Bodies. It is therefore now established as a regular programme activity within the Organisation and will receive priority consideration in the allocation of funds.

Letters have been exchanged at Directors- General level between FAO and WHO confirming their mutual collaboration in PAAT.

Participation in the Programme Committee has been revised to promote greater regional representation , including that of the ISCTRC (International Scientific Council for Trypanosomiasis Research and Control), and increased donor involvement. Recent new members include USAID, Japan and Switzerland.

Co-ordination of Liaison officers meetings with those of the Advisory Group co-ordinators has been established.

Considerable progress has been made on the development of the information systems for both animal and human trypanosomiasis

Progress has been recorded in an evaluation of the socio-economic impact of trypanosomiasis and in the identification of priority control strategies.

Endorsement has been given, by Advisory Group Co-ordinators, to the conceptual outline of PAAT Plans of action for tsetse and trypanosomiasis control.

Position papers, as commissioned by the Committee on technical and policy aspects of the Programme, are under development following open discussion via e-mail. That on drug resistance having been published as the first in the PAAT Technical series.

A new catalogued series of PAAT scientific and technical publications has been initiated

Publication of TTIQ (Tsetse and Trypanosomiasis Information Quarterly) has continued throughout 1998 (Volume 21).

A revised field manual on trypanosomiasis control and diagnosis is under publication in English and French language versions

A glossy brochure announcing PAAT, in English and French, has been produced and widely distributed.

A PAAT Quarterly Newsletter has been initiated under DFID funding (first issue December 1998).

All meeting reports for 1997 and that of the 1998 Advisory Group Co-ordinators have been finalised and distributed.

A preliminary technical assessment of a proposal for tsetse eradication, using SIT (Sterile Insect Technique), in Ethiopia has been undertaken at the request of the Committee.

3. INFORMATION SYSTEMS DEVELOPMENT

The prototype PAAT-IS (Information System) for animal trypanosomiasis was demonstrated to the meeting with emphasis being placed on introducing how the GIS based data component may contribute to the identification of priority areas conforming to the aims of the PAAT Plan of Action. Participants noted, with satisfaction, the progress made and endorsed the conclusions reached on this item by the Co-ordinators meeting in Harare.

The CD-ROM based information system, developed by WHO, for the human disease was also demonstrated. It is envisaged to serve as a source of information, a training tool, a bibliography and an epidemiological surveillance system. The Committee recorded their congratulations to Drs. Cattand and Jannin on the successful production of such a powerful and user-friendly system.

The need to ensure and consolidate effective cross linkages between the two information systems components was stressed whilst it was also suggested that the animal trypanosomiasis module should consider incorporating some of the innovative multi-media type presentations developed for the WHO version.

Conclusions and Recommendations

1. The meeting recorded their satisfaction with the development of the Sleeping Sickness and animal trypanosomiasis components of the PAAT Information system and recommended that the secretariat ensure effective and consolidated cross-linkages between them.

4. CURRENT SLEEPING SICKNESS SITUATION

Some 60 million people in Africa are estimated to live under the threat of sleeping sickness. It is a focalised disease currently present as an epidemic situation across much of Central Africa from Angola to Sudan. The prevalence of the disease is influenced by the migration (movement) of people which is aggravated by civil unrest, the nutritional state of populations and the availability of suitable climatic and ecological conditions for the survival of tsetse. In high prevalence areas of the Democratic Republic of Congo up to 10% of the population is estimated to be affected but due to limited resources only 25-30% are under surveillance.

Although at the continental level the disease cannot be considered an overall priority, especially when compared with malaria, AIDS etc., in certain foci it constitutes the single biggest human health risk. The funds available for disease control and treatment are only between 1 and 5% of the amount required. The inability to attract funds is believed to be largely due to the fact that sleeping sickness is a problem affecting poor rural populations who, when compared to their more affluent urban and peri-urban, counterparts do not have the political and social influence on the allocation and procurement of resources.

Conclusions and Recommendations

2. Insufficient attention is given to the growing sleeping sickness problem and representation on this subject at all PAAT meetings should be strengthened. Opportunities to integrate AAT and SS control need to be given increased attention with the strong recommendation that financial and technical support to contain sleeping sickness epidemics in Central Africa be considerably strengthened, especially in areas where there is an urgent need to improve national surveillance systems.

3. In sleeping sickness endemic areas, control actions proposed against animal trypanosomiasis should establish a secure link with the Ministry responsible for the human disease.

4. The meeting noted the relevance of the SAT Technique for application to sleeping sickness epidemics. WHO should undertake the making of a video to emphasis how the influence of extreme environmentalists is affecting the lives of those threatened by sleeping sickness. This would open opportunities for involving major donors who have initiatives in emerging and communicable diseases

5. PLAN OF ACTION AGAINST ANIMAL TRYPANOSOMIASIS

5.1 Strategies for Control

As endorsed by the Advisory Group Co-ordinators, the meeting recognised two approaches to tsetse and trypanosomiasis management; one being farmer/community based, and consequently a rather small scale effort, the other more aggressive and based on area wide disease management. Whilst the first option invariably has as its objective sustainable disease control the second, if sustained, is orientated towards eventual vector/disease eradication. A comparative table of the two strategies was presented and is recorded below.

Although the meeting recognised this distinction there was some discussion on the division between the two. As a result it was accepted that due to the variation in the pattern and distribution of trypanosomiasis and its impact on farming scenarios there could often be an overlap. Moreover, it was appreciated that initiatives taken at the farmer level could, if successful, expand and be taken up on an area-wide scale. Similarly, although it was accepted that certain control techniques may be applied equally in both scenarios, a general distinction could be made that area wide programmes would usually demand more strictly controlled conditions and the application of more specialised technologies such as sequential aerial spraying (SAT) and/or SIT rather than those based on vector attraction to artificial and animal baits. Of the latter artificial baits have been applied in a wide variety of situations but with usually limited success, whereas animal baits are rapidly gaining popularity at the farmer level. It was also agreed that where economically justified and technically feasible the preferred area wide objective should be tsetse eradication.

Farmer/community Based		Area Wide
protect individual animals	Objective	enhance agriculture
animal health and associated constraints	Focus	tsetse populations and land-use
people centred; bottom-up approach; independent of donor funding; community empowered	Advantages	addresses tsetse/tryps problem; presents a win-win scenario; time bound with major results in short time.
a partial solution; gradual improvement; fails to address resource availability conflict; sustainability problems	Disadvantages	top-down approach; area bound; prolonged donor support; large but once only expenditure

During the general discussion it was proposed that the secretariat should consider drafting a guideline/checklist that would serve as a decision tool for investment in various scenarios. An outline for such a list as suggested by the proposer is indicated, as;

- is the proposed use of the land/resources prevented by tsetse ?
- If so what is the potential for increase in agricultural production ?
- considering these factors, is vector control or eradication preferred?
- based on above what combination of technologies is most suitable ?.

Conclusions and Recommendations

5. The meeting recognised two main approaches to tsetse and trypanosomiasis management; one farmer/community based and the other area-wide. In considering these options it was recommended that within the context of the PAAT Plan of Action greater emphasis should be placed on the application of area wide pest management principles. It was noted that the area wide approach does not exclude and in fact demands active support by the benefiting communities.

6. The meeting, based on the limited success of certain community based tsetse control schemes, concludes that not all technologies are appropriate to all situations and objectives, and recommends that further studies be undertaken to establish which mixes of techniques and modes of implementation best fit the different community and/or farmer based scenarios.

5.1.1 *Position paper on the SIT Technique*

Following the presentation of a draft position paper on this technique, the meeting noted the progress made in the refinement of the technology; especially that relating to the main components of fly rearing and the aerial distribution of sterilised insects. The recent eradication of *G. austeni* from Zanzibar was also reported and recognised as proof of the technical capability of the technique, particularly for use in area wide scenarios where the objective is eradication.

Referring to the particular proposal for tsetse eradication by SIT in the Rift Valley of Ethiopia the meeting appreciated the present action being undertaken to assess the feasibility as a precursor to implementation, noting also that this in-depth study had been initiated by the Government of Ethiopia with IAEA and other support, prior to the more preliminary PAAT technical assessment

Conclusions and Recommendations

7. The meeting in recognition of the justification for area-wide pest management, recommends the consideration of SAT and SIT as techniques which both offer potential to make a significant contribution to the control and ultimate eradication of tsetse flies.

8. The meeting appreciates that the feasibility study for tsetse control in Ethiopia, using SIT, had already been initiated prior to a similar recommendation made in the PAAT assessment.

5.2 *Criteria for identification of priority areas*

The criteria outlined by the meeting of Advisory Group Co-ordinators, as described in the Harare 1998 meeting report, were endorsed and accepted by the Committee with the following alterations/amendments:

Criterion 3; "the opportunities offered to maximise economic returns " should include consideration of the potential for farming expansion and intensification. Also within this criterion it was considered that attention be given to the opportunities for rural development and the production of cash crops that would enhance the economy. Some concern was expressed on the need to also include issues of land tenure especially where these may adversely influence sustainability, land use and farming expansion. There is a need to consider tsetse control in the broader land use dimension. At the continental scale cattle distributions are distorted and they are generally distributed at the edges of fly belts. This distortion influences the cultivation/cropping patterns which in turn affects farming development and the distribution of people.

It was strongly stressed by the meeting that an additional and essential criterion, for acceptance of an area as a priority, was a stated commitment by the Government to the objective of tsetse and trypanosomiasis control.

Conclusions and Recommendations

9. The meeting endorses the Criteria for the PAAT Plan of Action as identified by the meeting of Advisory Group Co-ordinators (Harare, 1998).

5.3 *Priority areas - geographical locations*

Following the presentation of a GIS multi-layer analysis of the impact of tsetse/trypanosomiasis at the continental scale (Annex 3.) the meeting considered, in some detail, the priority areas indicated in West Africa (southern Mali/Burkina Faso and northern Cote d'Ivoire) and in East Africa (River valleys in West /South - West Ethiopia). These both being areas put forward, technically, by the Advisory Group Co-ordinators for priority consideration under the PAAT Plan of Action for animal trypanosomiasis control and, equally important, both having the declared commitment of the Governments concerned.

In the West Africa situation focus is placed on the constraint imposed on large areas with high potential for cotton production, where the influence of tsetse constrains the introduction of draft oxen and balanced land utilisation. Over 250 000 draft animals are involved in the Sakasso area of Mali alone. Trypanosomiasis

prevalence is high and oxen cannot be kept in the more fertile and better suited south-western part of the Sakasso area which, therefore, remains largely un-exploited

After some discussion the meeting agreed that, on the criteria provided, both areas may be considered of priority within the terms of the PAAT Plan of Action. They further recommended that the secretariat be charged with establishing regional task forces to further elaborate the impact of trypanosomiasis and its control in these areas and to make proposals for the intervention strategies appropriate for effective implementation.

In conclusion, the meeting stated its concern that focus on such priorities at the continental level should not be to the detriment and neglect of the problem at the national and/or community based levels, particularly when there are poverty implications..

Conclusions and Recommendations

10. The meeting endorses the geographic demarcation of two priority areas; one in West Africa (the common cotton production areas of Burkina Faso/Mali/Côte d'Ivoire) and the other in East Africa (the western plus south-western parts of Ethiopia).

11. The meeting recommends that the Secretariat, through the policy, planning and implementation module, takes preparatory action, in consultation with donors, for the formation of Working Groups for each of the geographic priority areas identified under the Plan of Action, in order that, upon the request of Member States, they may be prepared to assist with development and implementation of the proposed programmes.

5.4 Environmental impact of control

The results of some 40 work years of scientific studies into the environmental impact of various tsetse control techniques was presented by a representative of the Scientific Environmental Monitoring Group of the EC, which was originally established to monitor tsetse control operations in Southern Africa. The results indicated the following;

- Sequential aerial spraying (SAT) using endosulphan or deltamethrin is environmentally validated as a technique although precautions should be taken when spraying near large water bodies;

- Discriminate ground spraying using a synthetic pyrethroid is environmentally acceptable. Investigations into application of this technique using DDT also indicated that the environmental effects were of much less significance than when this insecticide is applied, at the higher rates required, for other agricultural and public health purposes. In temperate regions DDT use is much more hazardous than in the tropics. In the latter the half life of DDT on bark is estimated at 50 days and on soils as between 90 and 125 days whereas in the former the half life is some 10 years.

- The impact of artificial odour baits requires further studies. The major environmental impact is mainly due to the effects of constructing and maintaining the physical access required to operate in remote areas. There are also indications that they may affect the use of the habitat by mammals (disturbance factors) and influence the out migration of certain bird species.

- The use of insecticides on domestic animal hosts may, through ingestion and subsequent deposition of residues, have consequences for dung beetles which could then be further reflected in impoverished soils. Further investigations are recommended.

Conclusions and Recommendations

12. The meeting re-affirmed the conclusion by the SEMG that SAT causes only minor direct negative environmental effects and, therefore, offers the potential for use in area wide programmes noting that criteria need to be developed to permit the safe use of this technique in different sets of circumstances.

13. It is recommended that the secretariat pursue and facilitate the research required to determine the environmental impact of topically applied insecticides, particularly through residues in dung.

5.5 *Summary of overall discussion and conclusions on Implementation of the Plan of Action*

In discussing the ways and means of carrying forward the Plan of Action the meeting gave consideration to ongoing and proposed regional Programmes in East, West, South and Central Africa.

In general it was agreed that PAAT had identified the appropriate criteria to give focus to priority areas, indicated their geographical locations and provided an outline of the strategies to be adopted according to the objective required, i.e. farmer/community based or area wide control and/or eradication. It was, therefore proposed that the secretariat, drawing on current expertise available in the PAAT Advisory Groups, the ISCTRC and FAO Liaison Officers and elsewhere, be tasked with the formation of technical support groups who would identify ways in which to carry the plan forward. These groups should include government representatives and also involve interested donors. They would operate under the direction of OAU/IBAR in view of the latter's newly recognised responsibility for the Planning and Implementation aspects of PAAT (see section 9. PAAT Structures and co-ordination).

Concern was expressed over the delays being experienced in the planning and implementation of the proposal for the regional programme in West Africa, this concern was exacerbated by the fact that funds for research seemed to have been secured without the justification that the outputs of these activities would have an assured avenue for practical application. The meeting tasked the secretariat with conveying this concern to the EC as the main potential donor. With regard to the Central Africa region, it was recommended that any initiatives towards programme development and implementation should give major attention to alleviation of sleeping sickness.

In addressing the question of how to make further progress on these proposals it was agreed that the expertise involved should establish unanimity on the approaches and strategies to be adopted, ensure that the advances were taken in a progressive and logical manner and that the necessary funding be sought from the beneficiary donor and, where realistic, national authorities.

In conclusion the meeting was presented with a summary review of the three on-going and proposed regional programmes either funded, or intended for funding, through the EC.

- West Africa; some of the general concerns expressed are recorded above. More direct concerns were voiced over the delays in initiating action especially in view of the deteriorating trypanosomiasis situation in the region and the uncertainty over the countries to be involved. Drawing on all the preparatory work carried out over previous years, by various missions, institutions and pilot projects, an updated and realistic plan of action urgently needs to be developed for the consideration of the EC and other donors. The involvement of OAU/IBAR and the national FAO Liaison officers is strongly recommended.

- East Africa (FITCA); Progress towards implementation has been slow as the countries concerned have not been able to synchronise their activities and the production of the necessary documentation. The original basis for action was focussed on the sleeping sickness epidemic in Uganda and has been subsequently expanded to include Kenya, and Ethiopia, with Tanzania, Sudan, Somalia, Rwanda and Burundi still expected to be included. Management planning exercises at the national levels has resulted in the availability of individual national logframes. The meeting recommended that a co-ordinated logframe at the regional level be produced in order to facilitate improved co-ordination and synchronisation of activities.

- Southern Africa (RTTCP); The programme, involving Zambia, Malawi, Zimbabwe and Mozambique, is about to close after some 10 years in operation. The original objective was to eradicate tsetse from the common regional and discrete flybelt (320 000 km. sq.). After the first year the techniques planned for implementation (Ground and air spray) were denied to the programme on environmental grounds and replaced by target techniques. These have since been found unsuitable to the large scale use demanded, mainly because the technology could not be effectively applied and maintained by rural communities. This revised approach was also jeopardised through criticism that strategies were ill-defined, the required socio-economic studies were not implemented nor the approach to training revised until the very near the end of the Programme.

As a consequence of the lessons learned the meeting stressed the need to define success criteria for community participation and to appreciate that the criteria for tsetse control may be different from those set by the community. Furthermore, based on the experiences and achievements obtained through the implementation of tsetse control using artificial and live bait techniques, the meeting recommended that PAAT, as appropriate, explores area wide integrated approaches involving SAT, SIT as well as bait techniques.

Conclusions and Recommendations

14. The meeting noted its considerable concerns over the delays incurred in the implementation of the West African Regional Programme for Tsetse and Trypanosomiasis Control and Related Development and requests the Secretariat bring these concerns to the attention of the EU.

15. The meeting recommends that PAAT secretariat generates greater awareness among Governments so that they fully recognise the socio-economic and ecological impact of the trypanosomiasis problem and the related constraint on land utilisation.

6. CO-ORDINATORS REPORTS AND POSITION PAPERS

With reference to the position paper on control techniques, it was recommended that this be reviewed in order to take into account the divergent approaches of area wide control/eradication as opposed to individual action at the farmer level. It was suggested that an intermediate approach involving communities in small areas with a common objective may also be recognised, albeit as an intermediary between the two extremes. It was also felt particularly important that the paper should give clear guidelines on the appropriate tools for these divergent situations.

Consideration of the paper on Integrated Disease Management led to the conclusion that it needed to be broadened and that the secretariat should seek inputs from other appropriate experts.

Regarding the various draft papers on community participation and the social/economic and cultural impacts it was agreed that the secretariat consider amalgamating them to the extent feasible.

The secretariat was also reminded of the need to produce a position paper on privatisation of tsetse control, for the consideration of the Committee.

Conclusions and Recommendations

16. It is recommended that the secretariat should ensure that the Policy, Planning and Implementation module reports to the Committee on policy trends in tsetse and trypanosomiasis control. In this context the delivery of a position paper on privatisation should be pursued.

7. QUALITY CONTROL OF TSETSE AND TRYPANOSOMIASIS CONTROL PRODUCTS

The need for mechanisms that will ensure the quality of products and provide an advisory service to various levels of customers was fully endorsed by the meeting. Particular concern being expressed on the current situation whereby farmers had open access to many fraudulent and inferior products. It was therefore agreed that PAAT, in particular through FAO and WHO, as independent and impartial bodies, should advise on procedures to check drug quality, to define standards and facilitate agreements on test protocols. The secretariat was also urged to identify appropriate bodies to undertake the quality control required and to seek their association with the PAAT.

Conclusions and Recommendations

17. The meeting recommends that the PAAT secretariat urges Governments of tsetse affected countries to facilitate private sector involvement in tsetse and trypanosomiasis control, ensure quality control and licensing of drugs and other products and to reduce import taxes on these essential items

18. The meeting further recommends that the secretariat, through advice and services, make efforts to improve and ensure effective quality control of commercial tsetse and trypanosomiasis control products. Where appropriate this should involve the use of UN Agencies and their facilities

8. ASSOCIATED EU CONCERTED ACTION IN TRYPANOSOMIASIS

A description of the programme is given in the report of the meeting of PAAT Advisory Group Co-ordinators, Harare, October 1998. The support this action will provide to the activities and progress of the Research and Development module was appreciated. It was suggested that, providing the workshops were demand driven, donors could be asked to support the attendance of experts.

Conclusions and Recommendations

19. The meeting recognised the collaboration established between PAAT and the concerted action in recognition of the support to be given to the activities of the Research and Development module. It recommended that the secretariat ensure maximum collaboration and where possible ensure additional co-ordination with activities planned by associated research institutes and laboratories.

9. PAAT STRUCTURES AND CO-ORDINATION

It was noted that until now the bulk of the responsibilities for the day to day activities of the secretariat had been undertaken by FAO and that there was need for a more equitable distribution. The committee therefore agreed to the proposal that OAU/IBAR should assume responsibility for the Policy, Planning and Implementation module and that the details of this be decided through direct discussion within the secretariat. It was also appreciated that this internal re-organisation would facilitate the strengthening of the ISCTRC and so release the potential it offered to further the aims of the programme. The Committee requested that once funding and responsibilities had been agreed, they be advised of the arrangements made, including any changes proposed to the terms of reference as reflected in the logical framework.

Responding to the suggestion that both the Joint FAO/IAEA Division and the IAEA Technical Co-operation Department participate in and be officially represented on the PAAT secretariat, the Committee confirmed their agreement.

Conclusions and Recommendations

20. The Committee endorsed the proposal that IAEA representation and participation within the PAAT secretariat should include the Joint FAO/IAEA Division and the Technical Co-operation Department.

21. The meeting recommended that the IAEA, as a member of the secretariat, should nominate experts in order to ensure the availability of technical expertise in SIT at the level of PAAT Advisory Group Co-ordinators.

22. The meeting recommends that the profile and responsibilities of OAU/IBAR within PAAT are enhanced by assuming the secretariat responsibilities for the Planning Policy and Implementation module. The involvement of ISCTRC should also be further described and co-ordination/ collaboration between the various structures, adequately strengthened.

23. The meeting recommends that, following the changes foreseen within the secretariat together with progress made on the development of the Plan of Action, (both area-wide and local), the secretariat should examine and revise the PAAT Management plan (Montpellier Report), the TOR of the Secretariat as well as the representation to the Panel of Advisory Group Co-ordinators.

10. TRAINING

The lack of specific training facilities and opportunities was noted with concern, particularly for middle level and technical cadres. It was recommended that OAU/IBAR assess these needs at all levels whilst relating them to the facilities available and to defined policies for the implementation of tsetse control.

Conclusions and Recommendations

24. The secretariat, through the PPI Module, should undertake an assessment of training needs at all levels in order to report back to the Committee on the current situation with proposals on the actions identified to address them. Particular attention should be paid to the technical and middle level cadres.

11. REVIEW OF MANAGEMENT PLAN

The Management plan and logical framework matrix, as produced by the PAAT Planning workshop, Montpellier, April 1997, was reviewed. It was agreed that this document remained valid to the aims and objectives of the programme but that a further planning exercise should be held within the next 18 months to update the timeframe and to ensure that the outputs described remained realistic.

Conclusions and Recommendations

25. The PAAT Logical frame work should be highlighted at every meeting and included as an agenda item.

26. The secretariat should programme a workshop to revise and review and update the management plan produced by the Montpellier meeting (1997). This workshop should take place in mid-2000.

12. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

1. The meeting recorded their satisfaction with the development of the Sleeping Sickness and animal trypanosomiasis components of the PAAT Information system and recommended that the secretariat ensure effective and consolidated cross-linkages between them.
2. Insufficient attention is given to the growing sleeping sickness problem and representation on this subject at all PAAT meetings should be strengthened. Opportunities to integrate AAT and SS control need to be given increased attention with the strong recommendation that financial and technical support to contain sleeping sickness epidemics in the Central Africa be considerably strengthened, with special attention given to those areas where there is an urgent need to improve national surveillance systems.
3. In countries where sleeping sickness is endemic, it should be ensured that control actions proposed against animal trypanosomiasis should establish a secure link with the Ministry responsible for the human disease.
4. The meeting noted the relevance of the SAT Technique for application to sleeping sickness epidemics. WHO should undertake the making of a video that would emphasize how the influence of extreme environmentalist is affecting the lives of those threatened by sleeping sickness. This would open opportunities for involving major donors who have initiatives in emerging and communicable diseases
5. The meeting recognised two main approaches to tsetse and trypanosomiasis management; one farmer/community based and the other area-wide. In considering these options it was recommended that within the context of the PAAT Plan of Action greater emphasis should be placed on the application of area wide pest management principles. It was noted that the area wide approach demands active support by the benefiting communities.
6. The meeting, based on the limited success of certain community based tsetse control schemes, concludes that not all technologies are appropriate to all situations and objectives, and recommends that further studies be undertaken to establish which mixes of techniques and modes of implementation best fit the different community and/or farmer based scenarios.
7. The meeting in recognition of the justification for area-wide pest management, recommends the consideration of SAT and SIT as techniques which both offer potential to make a significant contribution to the control and ultimate eradication of tsetse flies.
8. The meeting appreciates that the feasibility study for tsetse control in Ethiopia, using SIT, had already been initiated prior to a similar recommendation made in the PAAT assessment.
9. The meeting endorses the Criteria for the PAAT Plan of Action as identified by the meeting of Advisory Group Co-ordinators (Harare, 1998).
10. The meeting endorses the geographic demarcation of two priority areas; one in West Africa (the common cotton production areas of Burkina Faso/Mali/Côte d'Ivoire) and the other in East Africa (the western plus south-western parts of Ethiopia).
11. The meeting recommends that the Secretariat, through the PPI Module, investigates the feasibility and makes proposals to donors for the formation of Working Groups for each of the geographic priority areas identified under the Plan of Action, in order that they may be in a position to assist with development and implementation of the proposed programmes when requested to do so by Member States.
12. The meeting re-affirmed the conclusion by the SEMG that SAT causes only minor direct negative environmental effects and, therefore, offers the potential for use in area wide programmes noting that criteria need to be developed to permit the safe use of this technique in different sets of circumstances.
13. It is recommended that the secretariat pursue and facilitate the research required to determine the environmental impact of topically applied insecticides, particularly through residues in dung.
14. The meeting noted its considerable concerns over the delays incurred in the implementation of the West African Regional Programme for Tsetse and Trypanosomiasis Control and Related Development and requests the Secretariat bring these concerns to the attention of the EU.

15. The meeting recommends that PAAT secretariat generates greater awareness among Governments so that they fully recognise the socio-economic and ecological impact of the trypanosomiasis problem and the related constraint on land utilisation.
16. It is recommended that the secretariat should ensure that the Policy, Planning and Implementation module reports to the Committee on policy trends in tsetse and trypanosomiasis control. In this context the delivery of a position paper on privatisation should be pursued.
17. The meeting recommends that the PAAT secretariat urges Governments of tsetse affected countries to facilitate private sector involvement in tsetse and trypanosomiasis control, ensure quality control and licensing of drugs and other products and to reduce import taxes on these essential items
18. The meeting further recommends that the secretariat, through advice and services, make efforts to improve and ensure effective quality control of commercial tsetse and trypanosomiasis control products. Where appropriate this should involve the use of UN Agencies and their facilities
19. The meeting recognised and endorsed the collaboration established between PAAT and the EU funded concerted action in recognition of the support to be given to the activities of the Research and development module. It recommended that the secretariat ensure maximum collaboration and, where possible, ensure additional co-ordination with activities planned by associated research institutes and laboratories.
20. The Committee endorsed the proposal that IAEA representation and participation within the PAAT secretariat should include not only the Joint FAO/IAEA Division but also the Agency's' Technical Co-operation Department.
21. The meeting recommended that the IAEA, as a member of the secretariat, should nominate experts in order to ensure the availability of technical expertise in SIT at the level of PAAT Advisory Group Co-ordinators.
22. The meeting recommends that the profile and responsibilities of OAU/IBAR within PAAT are enhanced by assuming the secretariat responsibilities for the Planning Policy and Implementation module. The involvement of ISCTRC should also be further described and co-ordination/ collaboration between the various structures, adequately strengthened.
23. The meeting recommends that, following the changes foreseen in the structure and responsibilities within the secretariat together with progress made on the development of the Plan of Action, (both area-wide and local) , the secretariat should examine and revise the PAAT Management plan (Montpellier Report), the TOR of the Secretariat as well as the representation to the Panel of Advisory Group and Co-ordinators.
24. The secretariat, through the PPI Module, should undertake an assessment of training needs at all levels in order to report back to the Committee on the current situation with proposals on the actions identified to address them. Particular attention should be paid to the technical and middle level cadres.
25. The PAAT Logical frame work should be highlighted at every meeting and included as an agenda item.
26. The secretariat should programme a workshop to revise and review and update the management plan produced by the Montpellier meeting (1997). This workshop should take place in mid-2000.

Fourth Meeting of the PAAT Programme Committee

Provisional Agenda

1. Opening address and introduction
2. Adoption of minutes of last meeting
3. Current status of PAAT activities
 - Secretariat Progress report
 - Information Systems and Communications Development
4. Sleeping Sickness Situation
5. Plan of Action for Animal Trypanosomiasis
 - Control strategies
 - The SIT Technique
 - Criteria for priority Areas
 - Geographic location of Priority Areas
 - Environmental impact of Control Techniques
6. Co-ordinators Reports and Position Papers
7. Quality Control of Control Products
8. EU Concerted Action Plan
9. PAAT Structures and Co-ordination
10. Training
11. Review of Management Plan
12. Conclusions and recommendations
13. AOB and Closure

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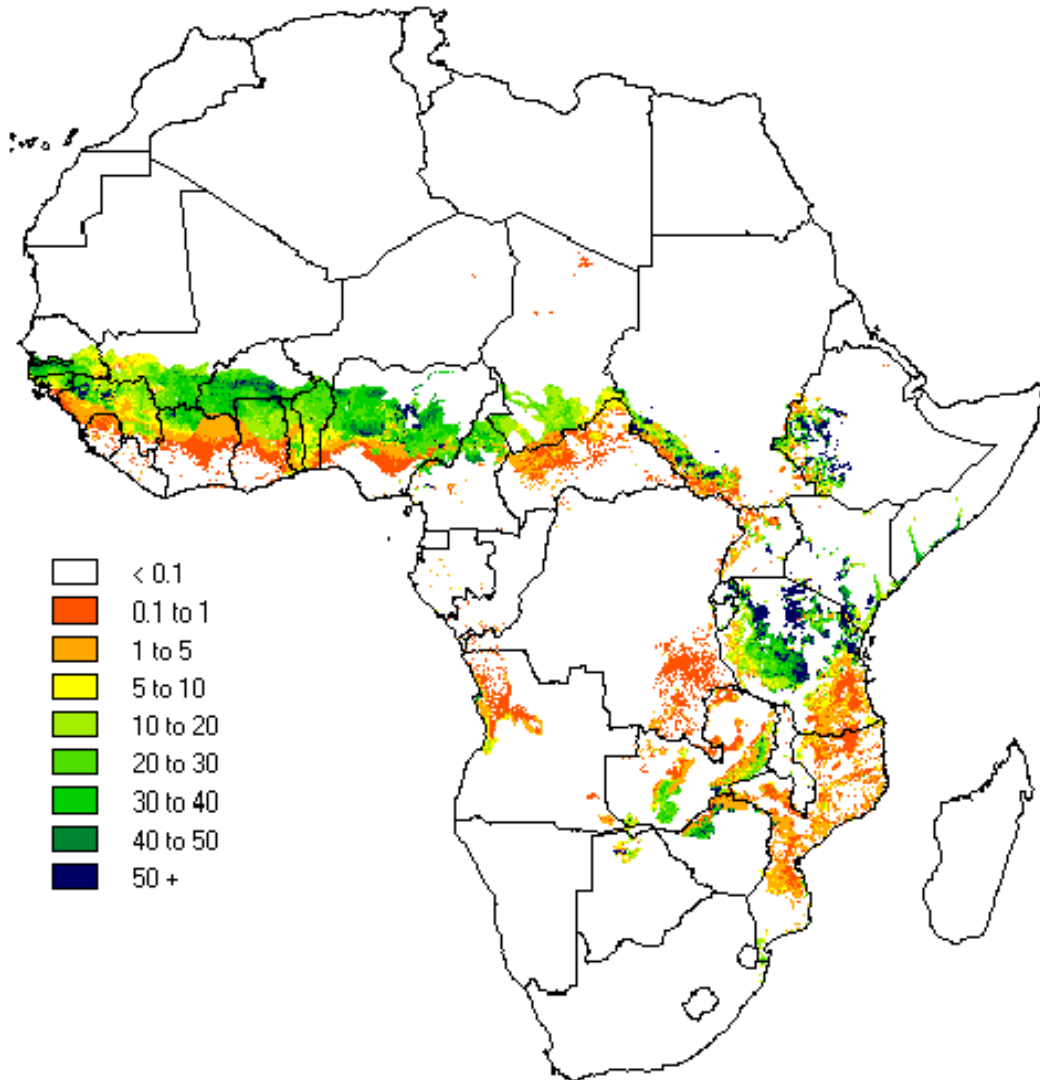
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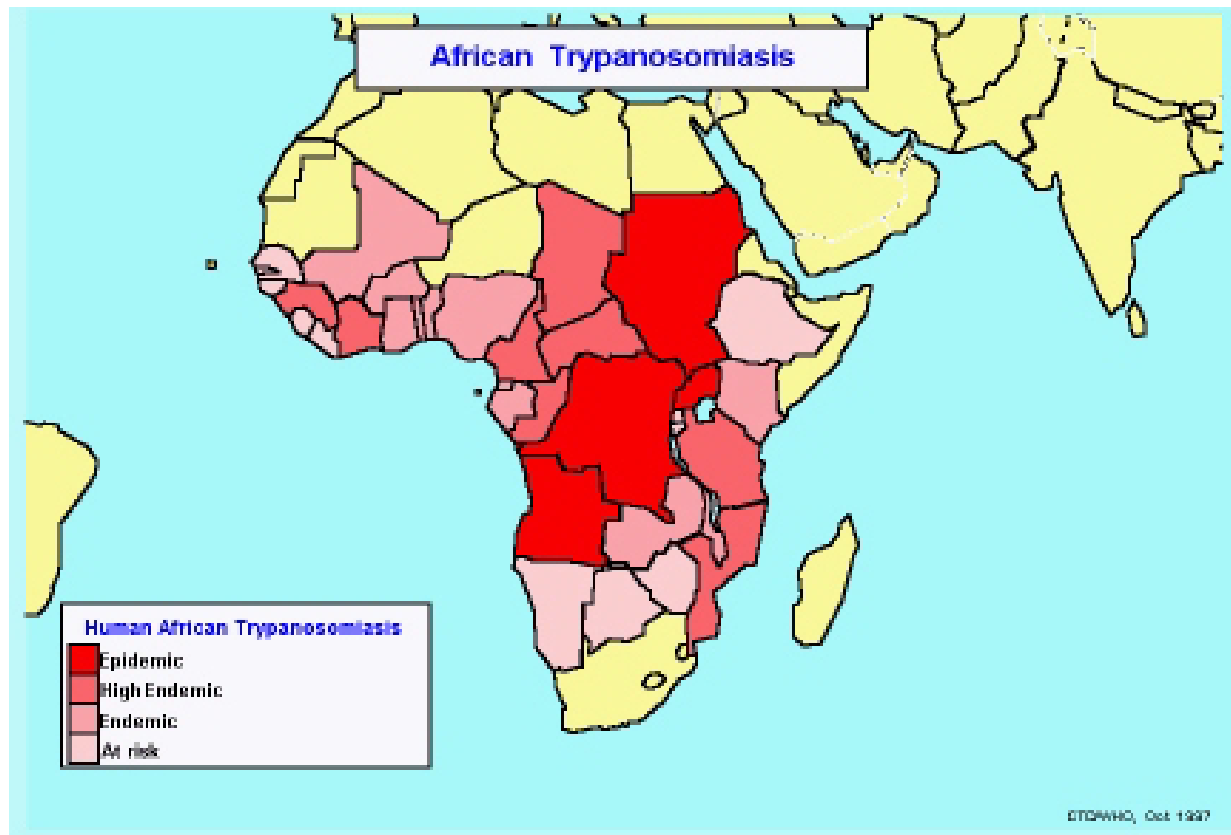
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Tsetse/ Animal Trypanosomiasis Impact Map
Predicted Change in Cattle Density per sq km



Tsetse/ Human Trypanosomiasis Impact Map
Levels of endemicity



Geographical Distribution

Four major levels of endemicity can be identified into which endemic countries can be classified depending on their level of disease prevalence. In each country the spacial distribution is highly heterogenous and occurs in foci and micro-foci.

- The countries where the disease is epidemic due to a high prevalence and an important transmission level: ANGOLA, DEM. REP. CONGO, UGANDA, SUDAN.
- The countries of high endemicity, where the prevalence is relatively high and increasing: CAMEROON, CONGO, CÔTE D'IVOIRE, CENTRAL AFRICAN REPUBLIC, GUINEA, , MOZAMBIQUE, TANZANIA, CHAD.
- The countries of low endemicity: BENIN, BURKINA-FASO, GABON, GHANA, EQUATORIAL GUINEA, KENYA, MALI, NIGERIA, TOGO, ZAMBIA.
- The countries where the present epidemiological status is poorly known: BURUNDI, BOSTWANA, ETHIOPIA, LIBERIA, NAMIBIA, RWANDA, SENEGAL, SIERRA-LEONE.