

PROGRAMME AGAINST AFRICAN TRYPANOSOMIASIS

8th MEETING OF THE PROGRAMME COMMITTEE

REPORT

Rome, Italy

26 – 27 April 2004

Food and Agriculture Organization of the United Nations Inter-Africa 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

Acronyms

| AAT ADB | Animal African Trypanosomiasis African Development Bank |
|------------|--|
| AU | African Union |
| CAADP | Comprehensive Africa Agriculture Development Programme |
| CIRAD | Centre de Coopération Internationale en Recherche Agronomique pour le Développement |
| CIRDES | Centre International de Recherche-Développement sur l'Elevage en Zone Subhumide |
| CTVM | Centre for Tropical Veterinary Medicine |
| DFID | Department for International Development (UK) |
| DNDi | Drug for Neglected Disease initiative |
| FAO | Food and Agriculture Organization of the United Nations |
| FAO/IAEA | Joint FAO/IAEA Division of Nuclear Applications in Food and Agriculture |
| FITCA | Earming in Tsetse Controlled Areas of Eastern Africa |
| GFAR | Global Forum on Agricultural Research |
| GPP | Global Partnership Programme |
| НАТ | Human African Trypanosomiasis |
| IAEA | International Atomic Energy Agency |
| IBAR | Interafrican Bureau for Animal Resources |
| ICIPE | International Centre of Insect Physiology and Ecology |
| IFAD | International Fund for Agricultural Development |
| IFAH | International Federation for Animal Health |
| ITM | Institute of Tropical Medicine |
| KETRI | Kenya Trypanosomiasis Research Institute |
| ILRI | International Livestock Research Institute |
| NEPAD | New Partnership for Africa's Development |
| NGO | Non-Governmental Organization |
| PAAT | Programme Against African Trypanosomiasis |
| PAAT IS | Programme Against African Trypanosomiasis Information System |
| PAG | PAAT Advisory Group Coordinators |
| PATTEC | Pan-African Tsetse and Trypanosomiasis Eradication Campaign |
| SARD | Sustainable Agricultural and Rural Development |
| SIT | Sterile Insect Technique |
| STEP | Southern Rift Valley Tsetse Eradication Project, Ethiopia |
| TCP | Technical Cooperation Programme |
| T&T | Tsetse and Trypanosomiasis |
| UNFIP | United Nations Fund for International Partnerships |
| USDA-APHIS | United States Department of Agriculture - Animal and Plant Health Inspection Service |
| WHO | World Health Organization |
| WHO/TDR | World Health Organization/Special Programme for Research and |
| | Training in Tropical Diseases |

Foreword

The eighth meeting of the PAAT Programme Committee was convened at the Headquarters of the Food and Agriculture Organization (FAO), Rome, Italy, 26-27 April 2004. The meeting focused on (i) progress and achievements of the four PAAT mandated organizations (AU/IBAR, FAO, IAEA, WHO), (ii) advancement in the preparation of conceptual notes for field programme proposals for tsetse and trypanosomiasis (T&T) interventions in the so far two PAAT-PATTEC agreed priority areas, i.e. the Southern Rift Valley of Ethiopia and the border area of the "cotton-belt" zone between Burkina Faso and Mali, (iii) economics of tsetse and trypanosomiasis (T&T) intervention, and (iv) the role of the private sector in T&T intervention activities.

The meeting was officially opened by Dr S. Jutzi, Director of the Animal Production and Health Division – FAO, who on behalf of FAO welcomed the participants. He underpinned the importance that FAO attaches to agricultural development in tsetse infested areas. He also mentioned that reduction of T&T pressure as an option of livestock development policy needs to be raised at the level of the NEPAD/Comprehensive African Agriculture Development Programme (CAADP). Fundamental to intervention is the causal relationship between poverty and development opportunities in tsetse affected areas. In this regard, the "area-wide integrated pest management", now duly placed in the broader context of Sustainable Agriculture and Rural Development (SARD), constitutes an appropriate strategy to combat the disease. Dr Jutzi stressed the role of FAO, through PAAT, to enhance synergies among all concerned international agencies and governments. A prerequisite for intervention remains that tsetse affected countries make explicit reference to the trypanosomiasis problem within their national Poverty Reduction Strategy Paper (PRSP).

The meeting was chaired by Prof. A.A. Ilemobade. FAO provided secretarial assistance. The meeting's Agenda and list of participants are included in the annexes.

1. MINUTES OF THE LAST MEETING

The report and recommendations of the 7th PAAT-PC meeting were revised and 1.1. endorsed. The necessity to incorporate T&T intervention into national priorities to alleviate poverty and improve food security was stressed. This aspect needs also to be raised in CAADP of NEPAD. Since the 7th PAAT-PC meeting, a series of events (e.g. workshops, meetings) were convened, and PAAT position papers and criteria on T&T intervention policies were published with a view to providing guidelines and principles on the integrated approach of T&T intervention with farming systems and sustainable rural development. The meeting welcomed PAAT actions aiming at promoting private/public partnership, particularly for quality control/quality assurance of trypanocides. This initiative should be extended to insecticides and other devices used for tsetse control. The meeting also welcomed the joint PAAT and Governments of Burkina Faso, Ethiopia and Mali initiative to develop concept notes for field T&T interventions in PAAT-PATTEC agreed priority areas (i.e. the southern Rift Valley of Ethiopia and the "cotton belt" zone of Burkina Faso and Mali).

2. MINUTES OF THE 9th PAG MEETING

2.1. The meeting approved the recommendations of the 9th PAG meeting, Pretoria, September 2003.

3. SUMMARY OF THE 8th PAAT-PROGRAMME COMMITTEE MEETING OUTCOME

3.1. Representatives of AU, FAO, IAEA and WHO reported on progress, priorities and planned activities of their respective organizations and their support to PATTEC.

3.2. AU/IBAR – J. Musiime

Dr Musiime presented the general achievements of FITCA (Farming in Tsetse Controlled Areas) project and the proposal for FITCA Phase II. The focus was on:

- community participation;
- integrating tsetse control with rural development;
- integrating the public service, the private sector and NGOs; and
- integrating research into the FITCA project.

Technical achievements concerned:

- tsetse control through the use of impregnated targets, epicutaneous application of insecticides on cattle and insecticide treated nettings;
- reduction of sleeping sickness;
- restocking and upgrading of cattle;
- treatment of cattle diseases other than trypanosomiasis and also poultry diseases;
- introduction and/or re-introduction of animal traction in the project area; and
- increased staple crops.

A preliminary assessment of the communal crush spray programme was also presented. Primary reasons to start the crush programme were tsetse and tick control and cattle vaccination operations. Benefits derived ranged from improved animal health (including reduced mortality), increased milk yield and better management of livestock (increased oxen work efficiency). The Phase II of FITCA will concentrate, *inter alia*, on environmental management, land-use and management of natural resources. Other components will include HIV-AIDS, farmers' field schools and regional coordination.

3.3. FAO/PAAT – R.C. Mattioli

FAO/PAAT activities since the 7th PAAT-PC meeting were presented. As introduction, it was reported that in tsetse infested areas of sub-Saharan Africa 55 percent of the population lived below the poverty line. The proportion of undernourished people in sub-Saharan Africa remained fairly stable during the period 1990 to 2001. There is evidence that the proportion of cultivated area and the prevalence of under nourishment is negatively linked. In this regard, vast areas facing the T&T problem are unsuitable to livestock-agricultural development. Therefore, removal of trypanosomiasis from those areas with potential for livestock-agricultural production can contribute to increase food security and reduce poverty. The role of PAAT as an engine to promote SARD and, through its Advisory Group Coordinators, to develop standardized normative procedures and methodologies for T&T interventions was highlighted.

Concerning FAO/PAAT support to member countries and PATTEC, it was reported that the FAO Progress Report on the implementation of PATTEC initiative was adopted by the 32nd FAO Conference (Rome, December 2003) as well as the follow-up of the consensus on PAAT-PATTEC agreed priority areas. In this respect two workshops were convened, one in FAO Headquarters, July 2003 and a second one in Ouagadougou, Burkina Faso, February 2004. Major outputs of the two workshops were the concept note "Livestock-Agricultural Development in tsetse and trypanosomiasis intervention area in the southern Rift Valley of Ethiopia", and the paper on "Poverty reduction through reinforcement and intensification of mixed farming in T&T intervention area in the cotton belt zone of Burkina Faso and Mali".

FAO/PAAT produced and published two PAAT Technical and Scientific Series papers on "Socio-economic and cultural factors in the research and control of trypanosomiasis", and on "Economic guidelines for strategic planning of tsetse and trypanosomiasis control in West Africa". The meeting was informed about the progress on three additional papers. Additional information concerned further development on FAO-IFAH (International Federation for Animal Health) partnership on quality control/quality assurance of trypanocides and preliminary contacts undertaken with donors for human and animal trypanosomiasis control activity in Chad and Sudan.

Prof. Mattioli also reported on the restructuring and updating of the PAAT – Information System (PAAT-IS) and the new PAAT website. He informed the participants that most of the PAAT publications, reports, training manuals, tsetse maps and other technical and scientific information are available on the website and are downloadable.

PAAT future activities will focus on:

- support to national and regional strategic planning of T&T interventions through the development of training module for integrating economic analysis with environmental and risk mapping production system analysis;
- finalization of the FAO-IFAH partnership;
- production and publication of PAAT position papers; and
- reinforcement of PAAT-IS and website, development of human capacity through distance learning on GIS data management and information and enhancement of coordination of cross-sectoral information (scientific, technical, policy strategies, development and research).

Also, FAO in consultation with PATTEC, will continue the process of PAAT-PATTEC harmonization and provide assistance in the formulation of SARD related T&T intervention programmes in agreed priority areas (i.e. Burkina Faso-Mali and Ethiopia).

PAAT core activities are financially supported by the regular programme of FAO (HQ and RAF Accra), IAEA, WHO and AU/IBAR. Additional funding resources are provided by DFID and IFAD.

3.4. IAEA – U. Feldmann

Dr Feldmann reported that the components of the Agency's work relevant to the T&T problem include:

- research and methods development on T&T;
- technical cooperation in support of Member State activities; and
- development of standards and guidelines and harmonization with stakeholders.

Research and methods development continue to focus on efficient and standardized mass production of high-quality sterile males for tsetse SIT, with emphasis on process and product (sterile males) quality assurance, including mating compatibility and competitiveness, and on the development of tools for facilitated strategic planning of integrated area-wide intervention against T&T, including the production and refinement of tsetse presence/absence risk prediction maps, and the development of molecular tools for studying tsetse population genetics.

In addition to in-house research and methods development at the Agency's Laboratories, IAEA is funding Coordinated Research Projects (CRPs). Three 5–7 year CRPs were completed in the past two years and one new CRP has been initiated:

- tsetse rearing automation (completed);
- improved attractants (completed);
- tsetse molecular genetics (completed); and
- quality assurance for tsetse sterile insect technique (SIT) components (new).

With regards to Technical Cooperation Projects, IAEA provides support to T&T affected Member States along the objectives of the PATTEC initiative through one regional project and eight national projects in Botswana, Burkina Faso, Ethiopia, Kenya, Mali, South Africa, Tanzania and Uganda. Requests from Member States for projects under the Agency's 2005–2006 TC cycle are currently under evaluation.

IAEA substantially contributes to the normative work already reported in the above FAO/PAAT section. In addition, IAEA initiated a discussion with PAAT partners in order to develop criteria for defining T&T free zones. Efforts are on-going on expanding the FAO partnership with the private sector on quality assurance of trypanocidal drugs to standardization and quality control of fabric for tsetse suppression.

In close consultation with AU-IBAR, AU-PATTEC, FAO and WHO the Agency secured US\$ 300 000 from UNFIP/US-DOS in support of creating tsetse-free zones in agreed priority intervention areas. In addition some US\$ 200 000 were from The OPEC Fund in support of mass rearing activities under the Ethiopian project STEP in the Southern Rift Valley, and contacts were made with the Japan Trust Fund for Human Security, also regarding support to STEP.

He reported further on the results of a recent internal and external auditing of the Agency tsetse programme. It was emphasised that relevant IAEA contributions may in future need to focus on the Agency's core mandate of applying radiation and nuclear and related techniques in support of development in Member States, i.e. the Agency will in future focus on the tsetse "SIT package".

3.5. **WHO – J. Jannin**

Field activities have been significantly increased, resulting in a stabilisation of the sleeping sickness (SS) situation in some countries. Three "SS elimination groups" have been launched for East, West and Central Africa, with the objective of eliminating disease foci in these regions. A concerted action project (WHO, FAO and ICIPE) for southern Chad is under development. Following a stakeholders meeting early 2004 in Nairobi, it was agreed to explore the possibility of an emergency intervention in southern Sudan and to set up a similar response for the Central African Republic. These actions and the different approaches need to be integrated.

Dr Jannin reported on the current agreements with Aventis and Bayer which are due to end in 2006. Negotiations are on going to transfer developed technology (i.e. research and SS treatment development results) and to continue drug donations. The partnership agreement between WHO and Aventis and Bayer may need to be modified in view of current commercial developments. Additional WHO efforts concern the expansion of the range of drugs available in collaboration with the Neglected Disease initiative. Discussions with the Gates Foundation have been undertaken to develop oral formulation of drugs to treat the first stage of SS. Diagnosis is also a focus of discussion with the Foundation. Research to complement and/or synergise SS control/surveillance and treatment continues to be a priority, and trials have been started. Training activities focused on courses in clinical trial design.

3.6. **PATTEC – H.M. Solomon** (on behalf of J. Kabayo)

PATTEC is an important component of AU strategic objectives and is a participatory initiative. Dr Solomon underpinned the importance of African countries committing their own resources to T&T intervention priorities and for T&T to feature prominently in their national Poverty Reduction Strategy Papers (PRSP). A new PATTEC Coordination Office has been established in AU Headquarters, Addis Ababa, with a special budget allocation, which should ensure its long term survival as a strategic initiative. International organizations (e.g. ADB) and initiatives (e.g. NEPAD) have been approached for support. In this regard, ADB has approved loans for T&T activities in Burkina Faso, Ethiopia and Uganda. A southern Africa T&T intervention programme, involving Angola, Botswana, Namibia and Zambia, has been proposed for funding its own area-wide operations.

3.7. Recent NEPAD/CAADP developments – J. Rushemeza

Dr Rushemeza opened his presentation by stressing that NEPAD is neither a funding nor an implementation agency. It is rather the result of the vision of a number of African Heads of State to create a catalytic framework within which partnerships are formed to identify priorities. Stakeholders include multi and bilateral agencies, NGOs and the private sector. The agricultural cluster, embodied in the CAADP, was endorsed by Heads of State in Maputo who instructed NEPAD to revise the Programme to include livestock, together with forestry and fisheries. FAO staff have been closely involved with these revisions, after consultation with regional bodies. The companion document of CAADP is being compiled for presentation to NEPAD and to the next Heads of State meeting in Addis Ababa, July 2004. FAO is also involved in assisting 50 countries to produce proposals for bankable projects to be presented to the donor community.

3.8. Long-term T&T management options in West Africa – G. Hendrickx

Tsetse transmitted animal trypanosomiasis is a complex disease that directly and indirectly impacts Africa's crop and livestock-agricultural activities. This awareness has generated over the past decade a drive and political will towards trying to tackle the problem at the continental scale. The presentation focused on the state of the art spatial tool to study how, in West Africa, the variety of agro-ecological setting may impact decision support towards that goal. The presenter described an approach towards the selection of priority areas for area-wide T&T control based on the mapping analysis of:

- dominant livestock systems with particular emphasis on the integration of livestock and crop agriculture and mixed farming practices; and
- tsetse ecology bands linked to the geo-climatic settings prevailing in West Africa: a northern dry band with fragmented tsetse populations and a southern humid band where tsetse is ubiquitous.

Priority areas are identified in the northern band of the tsetse belt where:

• due to fragmentation and/or confinement only to suitable vegetation along main river courses, fly populations are more vulnerable;

- fly re-invasion risk is minimal due to land pressure and adverse climatic conditions for tsetse; and
- mixed farming predominates and an improved integration of crop and livestock agriculture may yield the highest benefits.

Three case studies are discussed: the Togo national study (FAO project GCP-TOG-013-BEL), the study of Sideradougou pastoral area (CIRAD-CIRDES project) in Burkina Faso and the Mouhoun river basin study (FAO project GCP-RAF-347-BEL) in Burkina Faso. These three studies aimed at developing decision support tools for the planning and implementation of integrated T&T control were based on holistic data sets on the spatial epidemiology of T&T (vectors, pathogens, hosts) and the impact of the disease on human populations, their environment and their livestock production systems. The studies are complementary and, therefore, highly relevant with regard to the geo-climatic setting covered (in Togo a transect through humid to semi-humid West Africa and in Burkina Faso from semi-humid to dry area), and the scale at which the studies were conducted (in Togo at a national scale, on the Mouhoun area at the river basin scale, and the Sideradougou pastoral area at the village scale). It is clear from the analysis that any decision support towards T&T management in West Africa must consider the fact that the epidemiology of tsetse transmitted trypanosomiasis varies in different climatic settings and land use patterns. Therefore, the sustainable management of the disease will have to be systematic, stepwise and pragmatic. Based on the experience acquired in Togo and Burkina Faso a list of data inputs needed to achieve such a high level of integration is provided. It is concluded that an integrated T&T management approach relies on the quality of an extensive list of field data (vector, pathogen, host, livestock systems, agro-ecological settings) and the detailed knowledge of geo-epidemiological patterns. We must remain cautious when making choices and avoid being lured into selecting overly simple solutions for solving this complex problem. Though in West Africa elimination of the fly and the disease may be achievable in the drier parts and the northern limits of the tsetse belt, several crucial assumptions remain to be validated through field investigations. These include research on fly fragmentation, population isolation and fly dispersion (e.g. Mouhoun model). In the more humid parts, the most viable option remains an integrated approach combining vector suppression in epidemiological hotspots (e.g. Sideradougou model), and disease management at the herd level through the strategic use of trypanocides and/or genetic improvement of local trypanotolerant breeds (e.g. Togo model).

3.9. Tsetse habitat fragmentation and strategies for T&T interventions in Burkina Faso and Mali – S. de la Rocque

Climatic data, data on land use patterns, length of growing period (LGP) and cattle distribution have been used to assess the evolution of tsetse density and tsetse fragmentation (*Glossina tachinoides* and *G. palpalis gambiensis*) and the epidemiological spatial features of the disease over time (1982-96) in the area of Sideradougou, Burkina Faso. Agricultural practices (cultivation, cattle grazing patterns, other crop-livestock activities) have been found to profoundly modify tsetse habitats and act as major forces on the fragmentation and age structure of the tsetse populations. This in turn influenced the epidemiological landscape, including host-vector contacts, and thus modified the disease transmission pattern. Vector

control models and tools have been developed and tested in the field. Two strategies were applied:

- extensive and intensive suppression of tsetse densities under the threshold of parasite transmission; and
- application of limited fly control protocols in hotspots.

Field results revealed a dramatic reduction in fly densities and in disease incidence in sentinel herds. However, there is a need for additional research in order to finetune vector control models, identify major factors (e.g. climate evolution and/or changes, landscape modification, human pressure) responsible for tsetse fragmentation and fly population stress, and clarify their impact also on the phenomenon and dynamics of fly (re-)invasion [e.g. (genetic) isolation, dispersal].

3.10. Burkina Faso-Mali: Outline of T&T intervention in the "cotton belt" area in the context of the national Poverty Reduction Strategy – I. Sidibe, S. Maiga

In Burkina Faso and Mali agriculture and livestock represent the main source of income of more than 80 percent of rural families. In particular, cotton and livestock largely contribute to their livelihood. Nevertheless, the incidence of poverty in rural areas remains high (90 percent of the poor live in rural areas). The cross border "cotton belt" zone between these two countries has a favourable high potential for poverty reduction and increasing food security. This can be achieved through the enhancement and intensification of mixed farming. However, despite the high livestock-agricultural potential, the presence of T&T constitutes a major obstacle to the exploitation of natural resources and restrains livestock-agricultural development (in the "cotton-belt" area, trypanocides represent more than 70 percent of the total veterinary drugs used). Hence, Burkina Faso and Mali, with the assistance of FAO, have developed a note of interest addressing the problem of T&T. The development objective aims at poverty reduction through the reinforcement and intensification of mixed livestock-agriculture in the "cotton belt" area together with balanced use and protection of natural resources (reduction of soil fragility and conservation of soil fertility). The specific objectives target:

- to remove the dual burden of the disease and poverty through integrated T&T interventions;
- to reduce livelihood vulnerability and enhance the socio-economic conditions of rural families through the creation of a favourable livestock-agricultural production environment; and
- to promote sustainable rural development.

3.11. The Southern Rift Valley of Ethiopia: the way forward for rural livestockagricultural development to support the National Poverty Reduction Strategy – T. Alemu

Ethiopia is among the poorest countries in Africa (in rural areas poverty exceeds 90 percent and about 80 percent suffer from food insecurity) despite ranking among the first 10 in the world in terms of livestock resources. The development of this sector is essential to reduce poverty and food insecurity. This strategy is one of the pillars of the policy of the Ethiopian Government Programme targeting Sustainable Agriculture and Rural Development. Vast areas of the country are under high demographic pressure leading to over-exploitation of land, soil degradation and depletion of natural resources. This situation is exacerbated by the

threat posed by the presence of T&T, particularly in the Southern Rift Valley, which result in under-utilization of fertile low land, preventing a balanced exploitation of natural resources, and denying opportunities for development. The importance of this area for the successful implementation of the Agricultural Development Led Industrialisation Strategy of the National Poverty Reduction Strategy is underpinned by the fact that the Government of Ethiopia financially committed US\$3 million to eliminate the problem of trypanosomiasis in the area [Southern Rift Valley Tsetse Eradication Project (STEP), established in 1997]. Additional technical assistance is provided by IAEA, with financial support from the Government of the United States of America. Following a concertation at the international level [PAAT mandated organizations (FAO, IAEA and AU/IBAR), PAAT community, and AU/PATTEC] with Ethiopian Officials a concept note addressing the problem of "Livestock-Agricultural Development in T&T intervention area in the Southern Rift Valley of Ethiopia" was developed. The twin interlinked development objectives are to create and speed up livestockagricultural return in the lowland, and readdress agricultural development to reduce pressure on highland resources of the area. The specific objectives focus on:

- the removal of the T&T constraint through area-wide integrated intervention;
- to open some of the fertile lowland areas and enable expansion and intensification of mixed farming by removing the T&T problem; and
- to enhance socio-economic rural livelihood by the creation of a conducive livestock-agricultural production environment which stimulates intersectoral farm and off-season non-farm investments.

The proposed indicative budget of approximately US\$13 million should complement the ongoing activities that are already funded by the Government and supporting partners, including IAEA and US Government. The speaker informed the participants that the "Concept Note" was officially endorsed by the Ethiopian Government.

3.12. The role of the Private Sector in T&T interventions and partnership with FAO – J. L. Delforge, F. van Gool

The International Federation for Animal Health (IFAH) represents the animal health industry (manufacturers of veterinary drugs, vaccines and other animal health products) in both developed and developing countries across five continents. The mission of IFAH is to promote a predictable, harmonized, science-based and balanced regulatory and trade framework that supports an animal health industry which is economically viable and innovation driven, and contributes to a healthy and safe food supply as well as a high level of animal health and welfare. IFAH's priorities focus on:

- Regulatory Affairs: comprising the vital elements of the regulatory process efficiency, the harmonised application of legislation, the risk/benefit analysis, and the availability of drugs;
- Food Chain with emphasis on the need for communication with key stakeholders; and
- Image Management based on the need for comprehension of the industry and for recognition of its contribution to society.

Proposals for the role of IFAH in T&T interventions ranged from supply of quality drugs (quality assurance/quality control) to combat in the most efficient and safest way T&T and to provide services ranging from capacity building (e.g. training of veterinarians, technicians and farmers on pathologies, diagnosis), good veterinary practices (e.g. right use of drugs, recommendations of treatment regimes to avid drug resistance), sponsoring for setting private veterinary practices, distribution of didactic material for technicians and farmers, and creating awareness of good quality products and respect of withdrawal period. In addition to the partnership with FAO on quality control/quality assurance of trypanocides, IFAH developed collaboration with international, regional and national research institutes (e.g. CIRAD-EMVT, CIRDES, CTVM, KETRI, ITM, etc.), veterinary schools and universities (sponsorship of PhD students, supply of training material, lecturing), NGOs and veterinary services. The reporter stressed the need for the African veterinarians and farmers to acquire the necessary knowledge of the quality of veterinary drugs available in the local markets. In this context, the FAO-IFAH partnership assists in controlling the quality of veterinary drugs and communicates the results to all involved actors (Regulatory Authorities, Veterinary Services, etc.) so that the African market is in the position to ensure availability of very effective and safe drugs, enabling significant increase in productivity, decrease in mortality and increase in fertility. Also, quality drugs will contribute to supply healthy and safe food from animal origin.

3.13. Brief on FAO-IFAH partnership on Quality Control/Quality Assurance of trypanocides – R.C. Mattioli, J.L. Delforge

The conventional and by far the most prominent method to combat trypanosomiasis is by chemotherapy. Every year some 35 million doses of trypanocides are administered to domestic ruminants in Africa, corresponding approximately to more than US\$35 million. However, this figure underestimates the unofficial trypanocide market of unregistered products. The presence of counterfeit drugs is recognised as a world-wide problem, but more so in Africa. Two preliminary studies reported that a high fraction (range from more than 30 to more than 55 percent) of trypanocides sold on the local African markets is out of the label claim. Against this background, the Programme Committee of PAAT, in its 7th session (November 2002, Geneva) endorsed an initiative of IFAH to support PAAT in conducting investigations about the quality of available trypanocides, recommending products to conform to established and agreed standards. Also in a recent regional workshop concerning West African countries on the "Harmonisation des réglementations relative aux médicaments vétérinaires dans la zone UEMOA" (December 2002, Dakar), the severity of the problem posed by the presence and diffusion of counterfeit trypanocidal drugs, particularly in West Africa, was stressed. The objective of the FAO-IFAH partnership is to establish standards for quality drugs which allow pharmaceutical companies and laboratories, including local/small companies, to market and compete on equal basis according to internationally established quality control/quality assurance procedures. More specifically, the work aims at:

- establishing standards and protocols for the quality control of trypanocidal drugs;
- defining the requirements of analytical quality assurance;
- establishing good laboratory practices for chemical analysis;

- making accessible, on equal basis, to any company and/or stakeholders the generated scientific and technical information; and
- transfering the methodology and technology to West and Central Africa.

A Memorandum of Understanding between FAO and IFAH has been drafted and will be finalized in the next months.

Mapping the benefits: a new decision tool for T&T intervention – W. Wint 3.14. The purpose of the study is to investigate the feasibility of linking quantitative economic variables to a GIS spatial framework in order to provide new insights and reinforce the decision-making process for T&T interventions. The first phase of the work concerned Benin, Ghana and Togo; data have been collected for parts of Burkina Faso and Mali and are being analysed as the second phase. A range of standardised livestock production and price data were collected at national, province and district level from each country, together with the most recent livestock, cropping and disease data. These were amalgamated with the corresponding data layers from PAAT-IS and a new distribution map of trypanotolerant and susceptible cattle was produced for the study area. Existing information on the disease's impact on cattle production parameters was incorporated in herd models. These were used to estimate the potential benefits of T&T interventions for the different cattle breeds, thereby allowing the potential benefits to be mapped as well. The speaker outlined the extension of the study from the initial phase covering Benin, Ghana and Togo, to include models specifically appropriate for the Burkina Faso and Mali "cotton belt" zone. The implications for expansions in livestock populations and changes in their distribution are also examined and mapped. A map of potential benefits for the selected region was presented. The extent to which this approach complements and refines the current range of mapped variables and adds to existing decision-making tools was discussed.

3.15. Main points of the round table discussion

The meeting had a round table discussion on various topics that resulted from the different presentations and statements made by the participants. Key discussion topics included:

- progress on the "concept note", fund raising and partnerships in support of T&T intervention and related agriculture and livestock development in the Ethiopian Southern Rift Valley;
- progress on the "note of interest" to explore international support for eventual integrated area-wide T&T intervention measures in the "cotton belt" zone of Burkina Faso and Mali (initial focus on additional baseline data collection, feasibility assessment and preparatory activities); and
- expanded collaboration with the private sector on quality control/quality assurance of components used in T&T interventions.

Additional discussion concerned the criteria and mechanisms of declaring an area free of tsetse and trypanosomiasis and it was suggested to involve OIE in this matter.

Ms K. Sliter (USDA-APHIS) commended PAAT for the efforts undertaken in sharing relevant information and for initiating steps towards gathering support for T&T intervention in prioritised areas. She encouraged the PAAT community to advance from "alignment issues" towards implementation of operational field interventions. Also, she reconfirmed the strong interest and anticipated support from the US authorities to efforts aimed at creating sustainable tsetse free zones. In this regard, it was underlined that the management set up of operational intervention projects against the T&T problem is a crucial issue and reference was made to the commissions in screwworm SIT campaigns as an example of how effective management structures could be established for T&T intervention programmes.

Dr S. Moussa (ADB) confirmed contacts with PATTEC to support T&T intervention measures in several countries, including Burkina Faso, Ethiopia, Ghana, Kenya, Mali and Uganda. He mentioned that, following this initial phase, the programme would eventually be expanded to all tsetse infested countries. However, it was suggested to classify countries according to their degree of readiness for T&T intervention (e.g. necessary data, human, financial and technical resources). In addition, a clear holistic framework, including objectives, timetable and sustainability, needs to be developed. He observed that PATTEC would take the lead in managing and implementing proposed field intervention activities, while PAAT would have the advisory function. Also, he stated that the Global Environmental Facility (GEF) would be interested in funding the land use component of T&T intervention programmes. Discussion followed on the need to focus and concert international efforts for intervention in the next years to a few priority areas that are screened according to internationally agreed criteria, i.e. PAAT-PATTEC developed and agreed criteria and principles for prioritising areas for T&T interventions in the context of SARD.

Mr A. Rota (IFAD) stressed that IFAD is more inclined to support regional projects and holistic approaches which include the development of new methodologies and tools.

Dr M. Ghirotti (Italian Cooperation) commented that the ultimate objective of any T&T intervention programme is socio-economic development and human welfare and this goal should drive the formulation of the interventions.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1. The following conclusions and recommendations were formulated.

CONCLUSIONS

A. The current achievements in policy and strategy development for T&T intervention are strongly supported and welcomed.

- B. The emphasis adopted by the PAAT and PATTEC communities on assisting countries to attract donor support for priority areas is commended and should continue.
- C. The Programme Committee recognises and strongly supports the substantial achievements by African nations in committing their own resources to T&T activities.
- D. It also recognises that ensuring sustainable community involvement at all levels of T&T activities is vitally important.
- E. The Programme Committee continues to support efforts to promote drug quality control and assurance and recognises the value of discussion between FAO and IFAH in promoting partnership between agencies and the private sector.
- F. There is a need to provide donors with a consensus strategy, framework and timetable for prioritisation of sustainable interventions against T&T.
- G. The Programme Committee welcomes and appreciates the participation of the donor representatives, their clear advice and direction, and wishes a continuation of their active input in the identification of long term strategies for funding T&T activities.
- H. The Programme Committee appreciates the practical steps taken by the ADB in cooperation with PAAT and PATTEC in the preparation of regional intervention programmes.
- I. The Programme Committee notes that the concept note for the Southern Rift Valley of Ethiopia has been endorsed by the Ethiopian Government.

RECOMMENDATIONS

- A. Strenuous efforts should continue to raise the profile of T&T in country strategy documents, and to bring the topic into the primary relevant documents. In particular, it must be ensured that T&T interventions are integral part of the national sustainable rural development policy and human welfare.
- B. PAAT should continue to promote the involvement of stakeholders outside governments in T&T strategy formulation.
- C. The private sector should be more actively involved in the implementation of T&T interventions, with emphasis on identifying strategic, concrete actions. FAO-IAEA-private sector partnership (i.e. IFAH) should be pursued and extended to standardize fabrics and chemicals used for tsetse control.
- D. The Governments of Member States are encouraged to consider PAAT developed policies and strategies for T&T interventions and translate them into development of active field programmes.

- E. The Programme Committee recognises an urgent need for drug development and diagnostics for both human and animal trypanosomiasis, and strongly recommends that efforts be continued and expanded.
- F. PAAT should devise an independent standard process and mechanisms for evaluation of T&T interventions, technologies and activities.
- G. PAAT encourages PATTEC to design a holistic proposal for T&T intervention programmes, using PAAT-PATTEC agreed criteria/guidelines for joint international action.
- H. Member States and PAAT partners are encouraged to use PAAT-PATTEC agreed criteria/guidelines to screen additional candidate priority areas for T&T intervention.
- I. PAAT-PATTEC should assist member States in the West African priority area to produce a concept note for submission to Governments and subsequently to donors.
- J. PAAT Advisory Group Coordinators (existing and new) should be utilised to move PAAT-PATTEC objectives forward.

Annex 1

8th Meeting of the PAAT Programme Committee

FAO Headquarters, Lebanon Room, Rome, Italy, 26-27 April 2004

Tentative agenda

Monday, 26 April 2004

09:00-09:15 Opening address - *S. Jutzi* Introduction and objectives of the meeting – *A.A. Ilemobade*

09:15-09:30 Adoption of report of 7th Programme Committee meeting and action taken on the recommendations – *A.A. Ilemobade, P.H. Holmes*

09:30-09:40 Report on FAO/PAAT activities since 7th PAAT-PC meeting – *R.C. Mattioli*

09:40-09:50 Report from AU/IBAR – J. Musiime

09:50-10:00 Report from IAEA – *U. Feldmann*

10:00-10:10 Report from WHO – *J. Jannin*

10:10-10:30 Report on the progress in the implementation of PATTEC initiative – *J. Kabayo*

10:30-10:40 Recent NEPAD/CAAPD developments – J. Rushemeza

10:40-11:10 Coffee break

11:10-11:40 Long-term tsetse and trypanosomiasis (T&T) interventions in West Africa – *G. Hendrickx*

11:40-12:00 Tsetse habitat fragmentation and ensuing strategies for T&T interventions in Burkina Faso and Mali – S. de la Rocque

12:00-12:30 Discussion

12:30-14:00 Lunch break

14:00-14:30

Burkina Faso/Mali –Outline of T&T intervention in the "cotton-belt" area in the context of the National Poverty Reduction Strategy– *I. Sidibe, S. Maiga*

14:30-15:00 Ethiopia - Southern Tsetse Eradication Project (STEP) and the way forward for rural livestockagricultural development to support the National Poverty Reduction Strategy – *Temesgen Alemu*

15:00-15:30 Round table discussion

15:30-16:00 *Coffee break*

16:00-16:30 Round table discussion

16:30-16:50

The role of the Private Sector in T&T interventions – *J.-L. Delforge/IFAH* (plus other IFAH associated members)

16:50-17:00

Brief on FAO-IFAH partnership on Quality Control/Quality Assurance of trypanocides – R.C. Mattioli, J.-L. Delforge

17:00-17:30 Conclusions and recommendations of Day 1 – A.A. Ilemobade

17:30-19:00 Gathering together – Cocktail in the Aventino Room (8th floor)

Tuesday, 27 April 2004

09:00-09:30 Mapping the benefits: a new decision tool for T&T intervention – *W. Wint*

09:30-10:00 Discussion

10:00-10:30

Round table discussion on building up field programme proposals for integrated T&T interventions in SRV of Ethiopia and 'cotton-belt' of Burkina Faso and Mali

10:30-11:00 *Coffee break*

11:00-12:30 Round table discussion (cont'd)

12:30-14:00 Lunch break

14:00-14:30 Round table discussion (cont'd)

14:30-15:00 How PAAT can better assist T&T affected countries – moderator *P.H. Holmes*

15:00-16:00 General discussion and the way forward Conclusions and Recommendations Any other business Next meeting Closing

Annex 2

8th Meeting of the PAAT Programme Committee

FAO Headquarters, Lebanon Room, Rome, Italy, 26-27 April 2004

List of Participants

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