

**THE RECOMMENDATIONS OF THE 34TH CONFERENCE OF THE
INTERNATIONAL SCIENTIFIC COUNCIL FOR TRYPANOSOMIASIS RESEARCH
AND CONTROL (ISCTRC) AND THE 16TH PATTEC COORDINATORS MEETING**

LIVINGSTONE, ZAMBIA, 11-15 SEPT 2017

The International Scientific Council for Trypanosomiasis Research and Control (ISCTRC) is a platform that was established in the early 1949 and its operations taken over by the then OAU in 1964 as a vehicle to promote international cooperation in the fight against trypanosomiasis which is one of Africa's greatest constraints to socio-economic development, severely affecting human and livestock health, limiting land use, causing poverty and perpetuating underdevelopment on the continent. The Secretariat of the Council is housed at African Union Interafrican Bureau for Animal Resources (AU-IBAR) in Nairobi, Kenya.

The ISCTRC holds an International Conference every two years to disseminate scientific information on tsetse, human and animal trypanosomiasis problem, review control strategies and recommend appropriate approaches in research and control. It is as a result of these meetings that information on improving control of tsetse and trypanosomiasis has been acquired and has benefitted many countries on the continent resulting in improved livelihoods especially of the rural communities where the problem has the highest impacts. The research outputs emanating from the ISCTRC scientific community is providing new information necessary for smarter methods of tsetse and trypanosomiasis control.

The PATTEC Coordinators' meetings are held annually to assess the performance of all tsetse and trypanosomiasis (T&T) affected countries, identify bottlenecks, solutions and revise action plans to ensure accelerated progress. The meetings bring together all Tsetse and Trypanosomiasis (T&T) affected countries to present their progress reports and share lessons learned with others. This year's meeting coincided with the 34th ISCTRC Conference, hence a joint meeting was organized to ensure cost effectiveness and synergy of outcomes.

The 34th ISCTRC Conference and the 16th PATTEC Coordinators' meeting was held at the AVANI Victoria Falls Resort in Livingstone, Zambia between the 11th and 15th of September 2017. The Conference theme was, 'Capitalizing on the progress made against human and animal trypanosomiasis– the way forward in partnership with all stakeholders'. The conference was officially opened by the Minister for Fisheries and Livestock, Hon. Michael Katambo on behalf of His Excellency Mr. Edgar Changwa Lungu, President of the Republic of Zambia. The keynote address was presented by the Director of Rural Economy and Agriculture, African Union Commission, Dr Godfrey Bahigwa on behalf of the Commissioner, H.E. Mrs. Josefa Sacko. In this key note address, it was acknowledged that a lot of work has been done during the past 68 years of combating tsetse and trypanosomiasis (T&T) and it is now time to review the substantial progress made in terms of institutional arrangements, research, available technologies, approaches, partnerships, investments and lessons learned in order to bring the tsetse fly vector and trypanosomiasis under control in Africa.

The Director of AU-IBAR, Prof Ahmed Elsalwaly elaborated on the objectives of the 34th ISCTRC Conference and the 16th PATTEC Coordinators meeting which are; to review, T&T, control technologies, strategies and policy options; to Identify gaps in research and control and to make recommendations for T&T Research and control for the next two years. He thanked His Excellency Mr. Edgar Changwa Lungu for the commitment of his Governments in the fight against human and animal trypanosomiasis.

The opening ceremony was also graced by the Honourable Minister for Southern Province, Hon. Dr. Edify Hamukale; the Deputy Mayor representing his Worship the Mayor of Livingstone, Councilor Eugene Mapuwo; their Royal Highnesses, the Traditional Leaders; the Permanent Secretary for Fisheries and Livestock, Dr. David Shamulenge and the Principal Secretary, State Department of Livestock in the Republic of Kenya, Dr. Andrew Tuimur. In his opening remarks, the Minister highlighted the impact of tsetse and trypanosomiasis on rural development and human welfare on the African continent and called for concerted efforts to ensure total removal of the tsetse fly from the continent.

The conference was attended by 301 participants from 34 African countries and beyond. The presentations focused on the following thematic areas: The Pan African Tsetse and Trypanosomiasis Campaign (PATTEC); Human African Trypanosomiasis (HAT); Animal African Trypanosomiasis (AAT); Tsetse Biology and Control and Socio-Economics, Environment and Land Use. Keynote addresses were delivered under each of the thematic areas; and symposia were held with a focus on emerging themes such as tsetse and parasite genetics/genomics/proteomics.

During this meeting one hundred and fifteen (115) scientific presentations were made, ninety (90) of which were presented orally while twenty five (25) were presented as posters. Twenty seven (27) African countries presented their reports on progress of tsetse and trypanosomiasis activities since the last ISCTRC Conference held in Ndjamen Chad in the year 2015.

The inclusion of T&T control and elimination strategies and programmes into national development plans was highlighted as critical for the resource mobilization and sustainability of the fight against T&T.

The Conference appreciated the efforts made by National, Regional and International Organizations in ensuring access by the disease endemic countries to appropriate tools for tsetse and trypanosomiasis interventions. The elimination of HAT and the progressive control of AAT appear today as achievable and necessary goals, and they should be supported by all stakeholders in a coordinated manner.

It was recognized that the training and mentoring of young scientists was crucial in addressing the growing manpower demands of tsetse and trypanosomiasis research/control. In this regard the meeting appreciated the efforts of organisations that have supported capacity building and appealed to others to contribute to this noble effort.

The meeting observed with great concern the widespread occurrence of counterfeit drugs and/or drug misuse and the resultant phenomenon of treatment failure. The general consensus was that

all relevant stakeholders should work more closely with the relevant government arms to address the crisis in the shortest possible time.

The meeting appreciated the efforts made by scientists to generate new knowledge and tools that are appropriate in the planning of control/eradication programmes and advocated for their validation and adoption

Historical perspectives, the mandate and functions of the AU-IBAR/ISCTRC were presented and discussed. The meeting recommended the strengthening of the council to enable it respond to emerging challenges and new technological advancements.

The status of T&T elimination in Africa with respect to gains registered, challenges, lessons learned, best practice and future perspectives was presented and discussed.

The meeting made a number of recommendations that require implementation. To this end, the conference deliberations will be brought to the attention of the meeting of Specialised Technical Committee (STC) of Ministers in charge of Agriculture, Rural Development, Water and Environment on October 5 and 6 2017 organized by the African Union Commission in Addis Ababa, Ethiopia.

The Meeting acknowledged the high quality presentations made under the various thematic areas and the resultant discussions. The following recommendations were therefore, made:

1. That the African Union was requested to sensitise the national government officials through advocacy, with a view to influence policies on T&T, focussing on the allocation of resources and sustainability of control programs. The meeting therefore agreed that the recommendations of the 34th ISCTRC conference be brought to the attention of the Specialised Technical Committee (STC) of Ministers in charge of Agriculture, Rural Development, Water and Environment, during their meeting to be held on October 5 and 6, 2017 organized by African Union at Addis Ababa, Ethiopia.
2. The meeting noted with concern the lack of guidelines for use by the PATTEC country programmes. It was therefore recommended that the African Union takes the lead and collaborate with mandated international organisations in the development of these guidelines for the declaration of tsetse free areas.
3. It was also noted with concern that many countries have not integrated T&T strategies into National Development Plans as a priority for the mobilization of national and regional resources. Countries need to be reminded about the Head of States' and Government decision made in Lomé-Togo in the year 2000 to eradicate tsetse flies and eliminate trypanosomiasis from Africa. This should assist in prioritization by national governments in allocation of resources for T&T programs.

4. The meeting took note of the absence of regional reports and recognized the need to adopt a regional approach in the development of projects and in the search for funding. In this regard, the support of the Regional Economic Organizations will be especially sought. The AU-PATTEC Coordination Office will then be able to provide technical support to countries affected by the T&T and play the role of facilitator in resource mobilisation.
5. Noting with concern the increasing fragmented approach being pursued by partners in their efforts to contribute to the fight against T&T, it was recommended that ISCTRC and the AU-PATTEC Coordination Office should develop multi-stakeholder partnership frameworks designed as a basis for partners' contributions to the fight against T&T.
6. Noting with concern the apparent disconnect between T&T research and field operations and the increasing trends where some researchers and research institutions are doubling as field implementers, it was recommended that the ISCTRC strengthens its coordination role to enhance policy dialogue in the translation of T&T research outputs into field application.
7. The meeting observed with great concern the widespread occurrence of counterfeit drugs and/or drug misuse and the resultant phenomenon of treatment failure. The general consensus was that all relevant stakeholders should work more closely with the relevant government arms to address the crisis using new approaches including establishment of testing labs.
8. It was noted also with concern that PATTEC Country reports lacked information and detail on non-tsetse transmitted trypanosomiasis, and recommended that efforts be made to give adequate prominence to this very important area.
9. On the issue of HAT research, control/elimination as a public health concern by 2020 and noting the continued and remarkable progress made. The meeting recommended:
 - a) That control strategies should be adapted accordingly to the subsequent changes in epidemiological status, as well as to the new tools becoming available;
 - b) That the ownership of countries of the elimination goal should be reinforced to ensure political sustainability of the process while progressive integration of control and surveillance activities in the routine health system should also be recommended to ensure the technical sustainability;
 - c) That in order to improve surveillance of the disease, the use of existing tools should be optimized, and quality be regularly monitored. It must be stressed that parasitological confirmation of cases remains essential. New diagnostic tools and algorithms should be independently evaluated. Initiatives to improve funding and access to screening and diagnostic tools were encouraged;
 - d) That despite the relatively lower burden of *rhodesiense* HAT, it is important to consider its situation and its particularities in order to ensure it is not left out:

- A multi-sectoral approach (One Health) is essential to address this disease;
 - The increased use of rapid diagnostic tests (RDTs) for malaria has reduced the use of blood smear microscopy for this purpose, thus incidentally diminishing the possibility of diagnosing *rhodesiense* HAT via microscopy in the same patient. The use of blood smear microscopy in *rhodesiense* HAT endemic areas should be encouraged;
 - Considering the significant adverse events related to current therapeutic tools for *rhodesiense* HAT, the ISCTRC encourages partners to invest all possible efforts to extending the clinical trials of fexinidazole as a treatment for *rhodesiense* HAT;
- e) That taking into account the importance of the Atlas of HAT in mapping the disease and supporting the planning of activities for HAT elimination, the transfer of capacity for the use of this tool at national level in endemic countries is highly encouraged;
10. The meeting appreciated efforts made to generate new knowledge in the areas of parasite and vector genetics/genomics/proteomics and chemical ecology e.g. tsetse population genetics, vector and disease predictive modeling, tsetse attractants/repellants and transmission blocking vaccines using metacyclic antigens. The meeting recommended translation and sharing of this knowledge with national control programmes to enhance control efforts and allocation of funds.
11. On the issue of vector research, control/eradication the meeting made the following recommendations:
- a. That there have been recent developments and access to new tools for T&T control and that these need to be optimized for different applications by national control programmes;
 - b. That tsetse control interventions should take into consideration spatial distribution and trypanosome infection in order to maximise cost-benefit ratios in the control of AAT;
 - c. That tsetse control interventions should take into consideration sustainability mechanisms to avoid re-infestation of controlled areas;
 - d. The new tools presented should be taken into consideration for T&T control and to update tsetse distribution according to climate and land use changes.
 - e. Considering the link between tsetse distribution and climate change and T&T control, institutions with focus on climate change issues should be approached for funding;
 - f. Non-tsetse transmitted trypanosomiasis continues to be an important area and it is recommended that efforts should be enhanced in the development of new olfaction and visual baits for the control of the vectors to maximise control of *Trypanosoma evansi* infections;

12. The Progressive Control pathway including road maps for AAT was presented. However it was noted that non-tsetse transmitted trypanosomiasis was not included. The meeting recommended that this be further looked into, working closely with OIE.
13. It was recognized that the training and mentoring of young scientists was crucial in addressing the growing manpower demands of tsetse and trypanosomiasis research/control. In this regard the meeting appreciated the efforts of organisations that have supported capacity building and appealed to others to contribute.