

Ten Good Reasons Why Tsetse Won't be Eradicated from Africa in the Foreseeable Future

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Presentation in debate on: "Is tsetse eradication feasible or desirable?"
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British Society of Parasitology: Trypanosomiasis and Leishmaniasis Seminar
Edinburgh, 8th -11th Sept 2002.

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Why NO to Eradication, but YES to Further Control

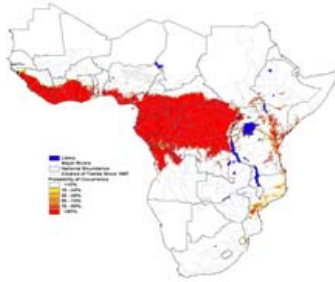
- **Pan African Tsetse and Trypanosomiasis Eradication Campaign.**
 - Launched last year by the OAU in Ouagadougou;
 - Originally conceived of as the Pan African Tsetse Eradication Campaign;
 - Eradication is unachievable in the foreseeable future;
 - Extended, or enhanced control is a more realistic and sustainable strategy.
- **What does "eradication" mean ?**
 - Complete and permanent elimination, or extinction of an organism, or group of organisms, from a specific region.
- **Why is the eradication of tsetse from the whole of Africa neither feasible, nor desirable in the foreseeable future ?**
 - Bio-geographical/environmental considerations;
 - Institutional weaknesses and logistic constraints;
 - Historical reasons: lessons of past experience;
 - Other, more pressing rural development needs.

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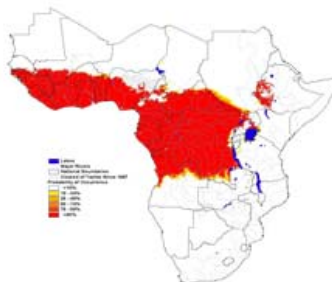
Bio-geographical Considerations

1. **Extent:** 8–10 million square kilometres of Sub-Saharan Africa, 37 countries; 3 times the area of European Union;
2. **Diversity:** 30 species/sub-species; wide range of habitats.

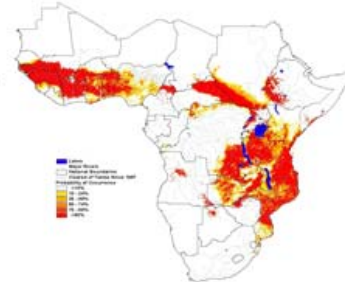
14 Rain Forest Sp.
(Fusca Group)



9 Riverine Sp.
(Palpalis Group)



7 Savanna Sp.
(Morsitans Group)



3. **Resilience of tsetse populations:** long lived females; good pupal survival; good dispersal; and a wide variety of hosts.

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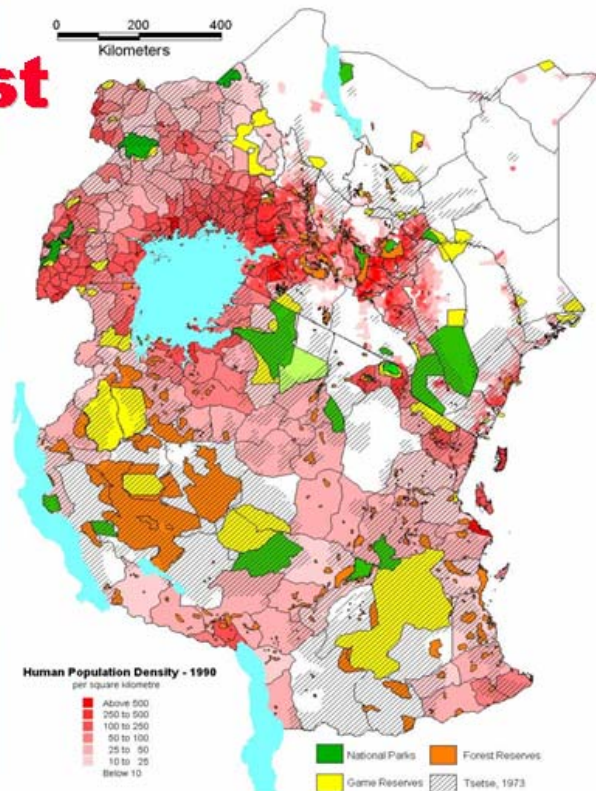
Institutional Capacity and Logistic Constraints

4. **Weakened Institutions and Limited Resources.**
 - Human, financial and material.
5. **Remoteness and Inaccessibility.**
 - Huge continent, vast distances, many remote regions;
 - Major logistic constraints to large scale operations.
6. **Unreliable, Out of Date Information.**
 - Much known about general biology, ecology and potential distribution of common tsetse species;
 - Major changes in habitat and wildlife hosts during 20th century;
 - Little known about actual, present-day distribution of tsetse, land cover and disease incidence.

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Lessons of Past Experience

7. Most, large-scale, tsetse eradication/ control programmes have not been maintained in the long term.
8. Isolation of operational areas is rarely certain. Reinvasion and/or population recovery have been recurrent problems.
9. Tsetse will persist in many protected areas for the foreseeable future.



Other More Pressing Needs and Priorities

10. Pursuance of an eradication strategy will divert and tie up resources, and reduce those available for other purposes.

With finite resources for rural development and poverty reduction, priorities must be set and hard choices made:

- Alternative disease management strategies;
- Control of other livestock diseases;
- Use of other livestock species/breeds;
- Improved animal husbandry and breeding;
- Better animal nutrition;
- Agricultural extension services;
- Primary education;
- Primary health care .

So, Where Do We Go From Here ?

- **To Summarise, Tsetse Will NOT be Eradicated from Africa in the Foreseeable Future For Many Reasons**
 - Extent, variety and resilience of tsetse populations;
 - Institutional weaknesses and logistic constraints;
 - Persistence of tsetse in remote regions and protected areas;
 - Other more pressing rural development needs.
- **The Way Ahead**
 - Forget about the eradication of tsetse and trypanosomosis;
 - Think, instead, about enhanced, or extended control;
 - Focusing on demand led implementation, through the primary beneficiaries: mixed farmers and livestock owners;
 - Future disease management strategy should encompass a broad range of control options for use in different circumstances:

Animal Husbandry Drugs Trypanotolerance Vector Control

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