

All you need to know about tsetse control at www.tsetse.org

One click of the mouse takes the user to www.tsetse.org where two new computer programmes that help plan and carry out tsetse control are now freely available.

The easy-to-use Tsetse Plan helps NGOs and farmer groups design and implement community-based tsetse control using techniques like treating cattle with insecticide and setting fly traps. The decision-support tool Tsetse Muse helps government and donor agencies plan and budget large-scale tsetse fly control schemes.

The www.tsetse.org website has lots of other information too - more than 140 web pages on tsetse biology and control, answers to frequently-asked questions, a socio-economic module and links to detailed technical information. Many countries are now accessing and using these resources, including Ethiopia, Kenya, South Africa, Tanzania, Uganda, Zambia and Zimbabwe.

www.tsetse.org brings together 25 years of know how

Tsetse flies affect 10 million square kilometres in tropical Africa, where they transmit the parasites that cause sleeping sickness in humans and nagana in livestock.

The flies range over large distances. This means that tsetse controls are tricky to plan, as they have to be applied over very large areas at the same time.

One of the main factors preventing effective tsetse control is inadequate technical information. The www.tsetse.org website brings together 25 years of know-how from scientists and institutions undertaking tsetse control operations in Botswana, Ethiopia, South Africa, Tanzania and Zimbabwe. Tsetse Plan and Tsetse Muse help people make use of this knowledge.





Tsetse Plan: For community action

Tsetse Plan is an interactive computer programme that helps NGOs and farmer groups plan tsetse control campaigns using bait methods. The user-friendly interface takes non-specialists step-by-step through assessing the feasibility of tsetse control in their area, developing a control plan, choosing appropriate ways of control and drawing up a shopping list and itemised budget.

Slideshows demonstrate how to make and use a whole range of traps, targets and odour dispensers. In one slideshow, for example, staff from the Botswana Tsetse Control Division show how to use a type of tsetse trap common in Botswana. The slideshows have been thoroughly vetted by tsetse control officers in Ngamiland in Botswana, Tanga in Tanzania and Mashonaland in Zimbabwe.

Who is using Tsetse Plan?

Lecturers and students from several universities have used Tsetse Plan and the tsetse.org website. The CD-ROM is being used in the University of Addis Ababa, Ethiopia, the National Tsetse Control Office, Tanzania and the Department of Veterinary Services, Zimbabwe.

Early versions of Tsetse Plan have been used in planning tsetse control operations in Tanzania and Ethiopia by a private consulting company, and by government veterinarians in Ethiopia, Malawi, Mozambique and South Africa. An NGO promoting community-based projects for pastoralists in Handeni, Tanzania, mixed crop-livestock keepers in Konso and Deme Valley, Ethiopia, and landless livestock keepers in Pangani, Tanzania, has also used Tsetse Plan.

Tsetse Muse for technical staff

Tsetse Muse is designed for technical people in donor and government agencies who have to plan large-scale control

operations that may include complex and expensive methods such as aerial spraying and sterile insect techniques.

Tsetse Muse helps users integrate the different control tactics and change the technical specifications to suit local conditions. Some methods, such as aerial spraying, are best for the initial attack; others such as insecticide-treated cattle and artificial baits need to be used to clear residual infestations and prevent re-invasion.

The models underpinning Tsetse Muse are soundly based on research and the experiences of tsetse control campaign managers. The lessons learned from both successful and unsuccessful campaigns, for example, on the successful release of sterile insects on Unguja Island, Zanzibar, and the failure of sterile insect releases on mainland Africa, are also incorporated. Information on spraying techniques, traps, targets and insecticide-treated cattle from many countries, including Burkina Faso, Ethiopia, Ivory Coast, Kenya, South Africa, Tanzania, Malawi, Zambia and Zimbabwe is generalised and built in.

Who is using Tsetse Muse?

Scientists in Botswana used Tsetse Muse to analyse the impact of aerial spraying in Ngamiland and explore why it was so much more successful than nearly 20 operations over the previous two decades. FAO is using Tsetse Muse in Uganda to assess various methods of control to compare their cost and effectiveness, as is Cawood Beef Ltd in Tete, Mozambique.

Computers and computer savvy

It goes without saying that the website and programmes are only useful where there are computers and software, and people who know how to use them. So, right now, computer-literate technical staff in government and NGOs in major cities are more likely to use the programmes than, say, government veterinarians working in remote areas.

For more information

For further technical information go to the RIU online database at www.researchintouse.com/database and type in **AHP05** and **AHP15** or e-mail riuinto@nrint.co.uk