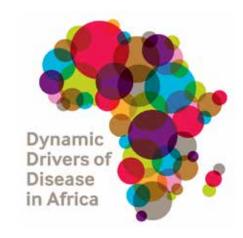
Alerting authorities to the reality of tsetse: how talking to locals made a difference



By working with villagers and their leaders, researchers have located the missing evidence for a tsetse problem in the Zambezi Valley – and ushered in a new era of evidence-based policymaking and government-village cooperation.

THE TSETSE fly is a major problem in Zimbabwe.

The fly transmits the parasite that in people causes sleeping sickness (human trypanosomiasis), a disease that is fatal if not properly treated. Every year there are some tsetse-related deaths – though misdiagnosis and a lack of reporting means the

numbers are likely hugely underestimated. In recent years, tourists have not been spared. For a country that looks to tourism for economic growth, the tsetse is bad news.

Then there is the issue of livestock disease. The same fly that can carry the parasite causing sleeping sickness, can also carry a

related parasite that causes the disease *nagana* (animal trypanosomiasis) in animals. *Nagana* is a big potential concern for the more than 3 million poor farmers in the Zambezi Valley who depend upon their livestock for their livelihoods.

Traps vandalised

To date, a lack of official knowledge about tsetse distribution in the Zambezi Valley has been a major obstacle to tackling the tsetse problem. Government researchers had carried out tsetse surveys along carefullyestablished transects, in particular along the main road from Harare, in Zimbabwe, to Lusaka, in Zambia. However, traps were only occasionally monitored and often they were found damaged by animals or vandalised by people. The trap cloth in particular would be stolen to be made into clothes.

The result was that the two key government ministries concerned with tsetse and trypanosomiasis in Zimbabwe, those of health and agriculture, found no evidence of tsetse at their study sites and no longer considered tsetse a problem



Villagers participate in tsetse mapping Image: Vupenyu Dzingerai

south of the game fence and in areas settled by people. The authorities suspended their control operations.

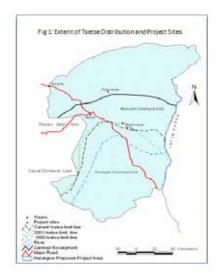
The Zimbabwe fieldwork of the Dynamic Drivers of Disease in Africa Consortium was,

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Senior government official

among other things, designed to document whether tsetse existed and, if so, how the fly was distributed along the Zambezi Valley.

Our researchers took a radical approach: interesting Valley inhabitants in the research and encouraging them to participate. Traditional authorities and informal leaders were approached. With the support of local people won, villagers were asked about sites most likely to harbour the fly. Through group-based participatory mapping activities, six sites



Extent of project distribution and project site in Hurungwe District

were identified in the Mukwichi Communal Land of Hurungwe District. Traps were laid in these sites and the villagers committed to protect them.

The findings were surprising, and at odds with previous government research findings. While floods had destroyed some of the study sites and made others unreachable, at least one trap had a positive result. What is more, this trap was monitored by a villager whose homestead and cattle *kraal* were nearby – something the government researchers found unbelievable.

A new cooperation

The message was clear: acting on their own, government researchers cannot learn about tsetse distribution. More accurate findings are gained when villagers and social scientists work together. Such collaboration leads to new conclusions – and, importantly, suggests alternative policies better able to deal with the problem of the fly. In the past, mistaken conclusions have led to wrong policies. As one senior government official said after hearing that the community traps had caught a fly: "This is a wake-up call for us in the department. We now know we have a problem in our yard, and must do something to deal with the fly."

This exercise also enabled villagers and their traditional authorities to learn about tsetse research and to have a role in it. Before, villagers had seen experimental devices in their forest but had no understanding that the traps were for their ultimate benefit. With a new vested interest in the research came a new attitude and a new cooperation. One traditional leader said: "We are now researchers here and eyes for government as far as tsetse

survey is concerned. From now on, traps for survey work are safe, because these are for our benefit." He said anyone caught stealing trap cloth or vandalising traps would be fined a goat – a sanction more

"We are now researchers here and eyes for government as far as tsetse survey is concerned. From now on, traps for survey work are safe."

Traditional leader

usually reserved for serious offences against traditional norms.

The exercise provided a wake-up call to everyone: to government, which by virtue of its one-way research approach had falsely assumed the problem of tsetse was over; and to local people and their leadership, who stopped vandalising research materials meant to further understanding of a problem seriously affecting their communities.

This is one of a series of impact case stories produced by the Dynamic Drivers of Disease in Africa Consortium, an ESPA-funded research programme designed to deliver much-needed, cutting-edge science on the relationships between ecosystems, zoonoses, health and wellbeing with the objective of moving people out of poverty and promoting social justice. Find more info at www.driversofdisease.org.

