Establishing a zone free of the tsetse and trypanosomosis problem in the Southern Rift Valley, Ethiopia, and assisting rural communities in agricultural and livestock development UN Trust Fund for Human Security



Fast Facts

Country: Ethiopia

Duration: May 2006 to May 2010 Implementing UN Agencies: IAEA; FAO

Other Implementing Partners: Ethiopian Science and Technology

Agency; SNPR Regional Ministry of Agriculture

Budget: \$1,760,000

Key Words: Agricultural development; poverty reduction; economic

development

BACKGROUND

With over 85% of Ethiopia's population dependant on agriculture and livestock as the mainstay of their livelihood, the proliferation of the tsetse fly, which infected large swathes of livestock with the deadly trypanosomosis parasite, posed a significant threat to the human security of the people of Ethiopia. Only two generations ago, sustainable livestock and agriculture played a central role in the social and economic life of rural communities in Western and South-western Ethiopia. However, the advancement of tsetse and trypanosomosis (T&T) made it impossible

to continue along this trajectory. Combined with the impact of climactic events such as drought and soil erosion as well as human-induced environmental degradation, including the over-exploitation of land, soil degradation, and the depletion of natural resources, the threat of T&T was denying rural communities opportunities for agricultural investment and community development. As a result, about 80% suffered from food insecurity and 90% of the rural population were kept in persistent poverty.

PROGRAMME OVERVIEW

GOALS AND OBJECTIVES

As the first project of its kind to address the impact of T&T through a holistic and sustainable framework, the goal of the project was to have a catalytic effect on the overall advancement of sustainable rural development in Ethiopia. Specifically, the project focused on: (i) the expansion and intensification of mixed farming in fertile areas of the region through an area-wide

removal of the T&T constraint; (ii) the enhancement of rural livelihoods by creating a conducive environment for live-stock agricultural production and by accelerating the return of livestock to the targeted areas; and (iii) the reduction of land-use pressures such as overgrazing in the Southern Rift Valley.

BENEFICIARIES

Smallholder farmers, livestock owners and rural communities were the target beneficiaries of project's activities. Special focus was given to women who constitute the majority of labour in food production and therefore faced the highest reduction in income as

a result of the T&T problem. Children who suffered insufficient nutrition and inadequate education as a result of the poor financial situation of effected households were also beneficiaries of the project.





NOTABLE ACHIEVEMENTS

(i) The project successfully contributed towards the eradication of the tsetse fly in the Southern Rift Valley. By upgrading facilities and building the technical capacity of national teams, laboratories in the affected areas were able to produce over 300,000 sterile male flies per week. The Sterile Insect Technique (SIT) was essential to the success of the T&T elimination programme. Prior to the project, tsetse control activities were limited to those areas immediately surrounding villages, but the upgraded laboratory facilities, coupled with the provision of offroad vehicles and motorcycles, allowed the project to successfully expand tsetse suppression operations to all parts of the 10,500 km² target area.

(ii) Furthermore, through the provision of technical expertise and GIS software, the project was able to provide technical support and build the necessary

national capacities needed for the systematic collection and mapping of entomological data and monitoring of activities. This resulted in a more effective and sustainable eradication of the tsetse fly in the neighbouring regions.

(iii) Meanwhile, the project embarked on activities to encourage farmers to return to the newly tsetse free areas, including support for improved agricultural practices, as well as opportunities for non-agricultural livelihoods. Participatory training sessions on integrated animal husbandry, production, and nutrition were provided, while locally appropriate manuals on calf rearing and feeding were developed. As a result, cattle production in the areas previously infested by the tsetse fly saw an increase of 300% over the course of the project.

LESSONS LEARNED

Tsetse and trypanosmosis is a very complex problem that often lies at root of rural poverty in Ethiopia. It highlights the interlinkages between the political, social, economic, and environmental factors that drive rural poverty and malnutrition. As a result, the project responded by taking a comprehensive and multisectoral approach that not only addressed the technical and logistical issues for eradicating the tsetse fly, but also tackled the wider socio-economic issues related to sustainable agricultural and livestock development. Accordingly, improvements to livestock productivity agricultural development activities were and implemented alongside the suppression of the T&T problem and were crucial in stimulating rural development in previously abandoned areas. Moreover, the project demonstrated the importance of national ownership in addressing critical and widespread threats to human security. By embedding the project into the national priorities of the country, the project was owned and implemented by the Ethiopian authorities with the necessary technical and capacity building support provided by the UN. This ensured the continuation of the activities beyond the life of the project and resulted in a more sustainable response mechanism that addressed both the technical and the behavioural factors needed for the achievement of sustainable rural development, poverty reduction and food security in Ethiopia.