

A coordinated multi-stakeholder approach to control fruit fly in West Africa

Fruit flies damage crops, reduce the availability of food and diminish quality. Transboundary pests of global concern, fruit flies are estimated to cause annual economic losses of more than US\$1 billion worldwide (FAO). West Africa is not immune. The discovery and spread of one fruit fly species, *Bactrocera invadens*, in the region in 2004 has had serious repercussions for mango production, exports and incomes.

This briefing note describes work undertaken by the Standards and Trade Development Facility (STDF), together with the Economic Community of West African States (ECOWAS) and other partners, to promote a coordinated multi-stakeholder approach to manage the fruit fly problem in West Africa.



Fruit flies: A major agricultural pest

Fruit exports from West Africa to the European Union (EU) provide incomes for small farmers and exporters, as well as those employed in packing plants. However, since 2004, the success and future of this trade has been threatened by the rapid spread of fruit flies.

This pest has resulted in a rise in interceptions and destruction of fruit exports destined for the EU market. Between 2006 and 2007, seizures and destructions linked to fruit fly increased by 23 per cent. Mango has been the main product affected in terms of production losses, as well as export volumes and value. One study in 2008 estimated that fruit flies generated losses of up to 85 per cent of mango production in West Africa, depending on fruit varieties and the harvest period.

In a region affected by persistent above-average food prices, extreme weather events and civil insecurity, fruits are an essential part of a nutritious, balanced diet. Mango is widely consumed and one mango provides up to 60 per cent of daily Vitamin A needs as well as other nutrients. Controlling fruit fly is therefore also essential for food security.

Fruit fly species in Africa

- "*Tephritidae*", one of two "fruit fly" families, comprises over 4,000 known species. While some of these species are used as agents of biological control, many others feed on fruit, destroying it in the process.
- The most important genera of fruit-feeding flies include the *Ceratitis*, the *Anastrepha* and the genus *Bactrocera*. *Bactrocera invadens*, known to have originated in South Asia, is now spread widely throughout Africa. Unknown to science until its detection in Kenya in 2003, it has been endemic in West Africa since 2004.

Key messages

- Fruit flies seriously threaten agricultural production and productivity, reduce quality, disrupt trade and trigger huge financial losses, affecting livelihoods and food security in the process.
- Importing countries impose strict quarantine measures to prevent the spread of fruit flies, limiting agricultural development and export potential in affected countries.
- The *Bactrocera invadens* species of fruit fly has been endemic in West Africa since 2004. It has caused losses of up to 85 per cent in mango production, and continues to threaten fruit exports (especially mango) to the EU.
- In 2008, the STDF and ECOWAS in collaboration with the World Bank initiated a coordinated multi-stakeholder approach to control fruit fly, involving all concerned stakeholders. This work resulted in the development of a five-year, €25 million Regional Action Plan to control fruit fly in West Africa.
- In September 2009, national governments, research institutes, the private sector, donors and other partners endorsed the Regional Action Plan and adopted the Bamako Declaration, a roadmap to operationalize this plan.
- Ongoing efforts are needed to mainstream the Regional Action Plan in national and regional agricultural investment programmes and related Aid for Trade activities to enhance its sustainability.

Towards a coordinated approach

Several research institutes, bilateral donors, multilateral organizations and other stakeholders initiated activities to control fruit flies in different parts of West Africa after its detection in 2004. However, little if any efforts were made to promote synergies in their work. Concerned about the economic and social effects of this transboundary pest, ECOWAS and the West African Economic and Monetary Union (WAEMU) initiated a regional study in 2007 on fruit fly inflicted damages on fruit production in West Africa, with financing from the European Commission (EC). More than 300 stakeholders in Benin, Burkina Faso, Ghana, Guinea, Ivory Coast, Mali, Senegal and The Gambia were consulted.

The study, which comprised an in-depth analysis and recommended national and regional actions to control the pest, was validated by ECOWAS members in July 2008. But more work was needed to figure out the institutional arrangements and budgetary requirements to implement these actions. The STDF and the World Bank agreed to finance a complementary, follow-up initiative focused on these aspects. COLEACP, a professional association representing horticulture producers/exporters in African, Caribbean and Pacific countries and EU importers, carried out this work in early 2009. The outcome included a Regional Action Plan to control fruit fly in West Africa.

The Regional Action Plan

The five-year Regional Action Plan, budgeted at €25 million, is based on the following core pillars:

- **Surveillance:** Fruit fly surveillance will be organized nationally and coordinated regionally to ensure effective and targeted pest management.
- **Pest Management:** Producers will be trained in preventative pest management methods, control measures implemented in high infestation areas, and integrated management systems set up in high production areas.
- **Applied research:** New, effective and inexpensive pest management methods will be made accessible to producers.
- **Capacity building:** Support will be provided to develop and/or strengthen the regional and national organizations required to effectively manage fruit flies.

Cross-cutting activities in the following areas are integrated across the above pillars: (i) training; (ii) information exchange and communications; and (iii) monitoring and evaluation.

The Bamako Declaration

The Bamako Declaration sets out a roadmap to implement the Regional Action Plan in the months ahead. It was endorsed by representatives of national governments, research institutes, the private sector, civil society and development partners at a meeting in Bamako, organized by the STDF, ECOWAS and the Government of Mali, on 29-30 September 2009.

Experiences and lessons

Although still at an early stage, some experiences can be drawn from these efforts to develop a coordinated, multi-stakeholder approach to control fruit fly in West Africa, which may be relevant for other regions seeking to combat fruit flies or other transboundary pests.

Raise awareness at all levels. Convincing national governments, development partners and other stakeholders about the importance of prioritizing fruit fly control is essential. Providing evidence of the scale of the production and financial losses involved can be useful in this regard.

Promote partnerships and coordination across the region. Collaborative efforts by farmers and exporters, as well as government agencies, are crucial to ensure effective implementation of pest prevention and control measures. Scientific and research institutes also have useful information to contribute and a key role to play.

Encourage national and regional ownership. Promoting the active involvement of national governments and regional organizations, such as ECOWAS, is crucial to ensure that action plans have local ownership and are effectively integrated into national and regional budgetary and planning processes, thereby enhancing sustainability.

Take a regional approach. Regional approaches facilitate the design of sound policies and measures to effectively tackle transboundary issues such as plant pests. By facilitating an exchange of information, experiences and good practice, and undertaking cross-border activities (e.g. joint research and monitoring), regional approaches inform decision-making, support the development of national policies and ensure a cost-effective approach to tackle fruit fly.

Further information

- The Bamako Declaration, the Regional Action Plan and other related documents are available on the STDF website: www.standardsfacility.org