

Partnering to manage fruit flies and facilitate trade in South Africa

Timeframe: **2009 to date**

CASESTORY



LED BY

PUBLIC SECTOR

Department of Agriculture Land Reform and Rural Development (DALRRD)

PRIVATE SECTOR

HortGro - Deciduous Fruit Producers Trust (DFPT)

Fruit Fly Africa
(industry-owned service body)



GOVERNANCE

A Memorandum of Understanding (MoU) between DALRRD and HortGro clarifies the objective and scope of the partnership, as well as the expected roles and responsibilities of key stakeholders. This includes participation in joint programmes and delegation by the national authorities of specific services to FruitFly Africa (a subsidiary organization of HortGro).

FUNDING

The partnership started with joint (50:50) public-private funding, as defined in the MoU. Over time, as the partnership has expanded to provide services to a larger number of growers, the private sector contribution has increased. The funding ratio now stands at 76% (private sector) and 24% (public sector). Growers pay a user's fee for services provided under this PPP. These include setting, servicing and monitoring traps using sterile insect technique releases and aerial baiting programmes for fruit fly control.



PURPOSE

Thousands of South African farmers and traders rely on the horticulture sector for income and employment. Rising fruit fly populations continue to disrupt production of fruits, vegetables and plants, impacting livelihoods and exports. This partnership between South African industry groups and the government aims to strengthen the capacity of producers to control fruit flies to facilitate safe trade.

ROLES AND RESPONSIBILITIES

PUBLIC SECTOR

- Supervise records and operational activities on-site, including release and quality of flies.
- Coordinate with other partners, including the International Atomic Energy Agency, which has developed risk assessment protocols for sterile insect techniques with FAO and IPPC.
- Observe FruitFly Africa board meetings to ensure due diligence.
- Oversee the ongoing establishment of fruit fly-free and low prevalence areas in compliance with relevant International Standards for Phytosanitary Measures (ISPMs), including ISPM 4 on the establishment of pest-free areas, ISPM 26 on the establishment of fruit fly-free areas, and ISPM 35 on Systems approach for pest risk management of fruit flies.

PRIVATE SECTOR

- Apply sterile insect techniques to manage Mediterranean fruit fly (Medfly) populations, including setting and servicing traps, rolling out sanitation programmes, coordinating sterile insect releases on the ground and in the air, and aerial baiting.
- Raise growers' awareness on the importance of pest surveillance.
- Report information to the National Plant Protection Organization on fruit fly populations and incidences.

LESSONS

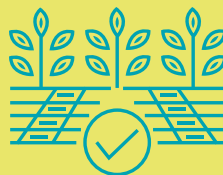
- New technologies, such as field apps, increase farmers' access to information, enabling them to more effectively determine the state of their traps and monitor pests.
- The private sector's direct involvement on-site allows for more timely decision-making, including quick responses to increases in fruit fly numbers.
- Actively engaging growers is crucial to implementing area-wide integrated pest management.
- The sterile insect techniques reduce pesticide use as part of integrated pest management approaches. This contributes to alternative mitigation options with positive environmental impacts and supports a systems approach.

UP-SCALING OPPORTUNITIES

- Surveillance of other fruit flies may enable the establishment of pest-free areas in line with relevant ISPMs. Based on the results achieved, South Africa joined forces with Mozambique to scale up this partnership at a regional level with STDF support. Launched in 2020, the project (STDF/PG/567) is backing Mozambique to establish and maintain pest-free areas and areas of low pest prevalence for fruit flies.
- The sterile insect technique approach could be replicated for other pests, such as the False Codling moth.

RESULTS

THE PARTNERSHIP HAS LOWERED FRUIT FLY INCIDENCE, CUT COSTS, DECREASED FRUIT LOSSES AND REDUCED THE NUMBER OF REJECTED EXPORT SHIPMENTS.



Since 2019,
IMPORTING PARTNERS FOUND NO MEDFLY INTERCEPTIONS
in crops produced in areas using sterile insect techniques.



At the end of 2021,
today, these areas included some
15,000 HECTARES OF COMMERCIAL DECIDUOUS FRUIT
(such as apples, pears, peaches and grapes), where average
WILD MEDFLY POPULATIONS HAD DROPPED BY 73%.

Based on the trends seen, further reductions are expected.