

Project objective

The objective of the project is the preventive control and control of infestations by phytophagous flies in horticulture in West African countries to improve the incomes of West African producers of fruits and vegetables, and particularly of small producers, and thus contribute to food security, poverty reduction and job creation in the sub-region.

The specific objectives are:

- ✓ Strengthen regional and national research systems and their strengthened coordination to provide producers with effective control techniques with low environmental impact;
- ✓ Control losses in fruits and vegetables due to infestation by phytophagous insects, in particular fruit flies, by strengthening the structuring of the sector at national and regional levels and by an operational and long-term monitoring and alert system.



Background

Fruit flies are a major problem for the horticultural sector in West African countries. They destroy 50 to 80% of fruit production. In 2016, the interception of mangoes at the borders of the European Union (EU) resulted in a loss of around 9 million euros for exporters in the region, or more than a third of the total value of exports of this year.

The impact of fruit flies on horticultural production has negative effects on the food, health and social security of the populations and on the environment (use of pesticides of all kinds); and on the economic security (income, exports, competitiveness) of the mango sector in particular.

In August 2014, ECOWAS initiated a project to support the regional plan for the fight and control of fruit flies in West Africa (PLMF), with the financial support of the EU and the Agence Française de Développement (AFD). The project set up a monitoring and control system that covers 11 ECOWAS countries. This system is an instrument for: (i) monitoring the quantity of mangoes in mango production basins, (ii) assessing infestation rates, (iii) launching alerts to different categories of actors in the sector, and (iv) planning and evaluation of production campaigns. Making these technologies available to producers makes it possible to prevent infestations and to act early, via a trapping system, through targeted, efficient, inexpensive, sustainable and environmentally friendly management (reduction in the use of chemical inputs). The PMLF has also made it possible to supervise the national laboratories of the targeted countries by preventing research protocols, and in particular to strengthen the National Center of Specialization in Fruits and Vegetables (CNS-FL) of Bobo-Dioulasso, on the way to becoming the "Regional Center of Specialization" for fruit and horticultural production in West Africa.

In a context increasingly marked by the impacts of climate change which influence the reproduction cycles of crop pests, and in particular of fruit fly infestation, the challenges that still arise at this stage are: (i) the consolidation and large-scale dissemination of research results (the techniques developed could not be finalized and disseminated on a large scale); (ii) the extension of activities to all 15 countries of the ECOWAS region (by expanding the regional system to Cape Verde, Liberia, Niger and Sierra Leone); and (iii) the institutional embedding of the operational mechanism both at regional and national level in a mechanism which can perpetuate this surveillance and control system in the 15 ECOWAS Member States..



The theory of change to achieve the objectives

The project has set itself the goal of achieving better coordination of national and regional research and phytosanitary surveillance / control systems allowing better research relevance and better availability of results to producers; better structuring of the mango sector allowing better interaction between public and private actors in order to sustain the funding devoted to the fight against fruit flies; and finally the inclusion of a partnership, multi-actor and coordinated base at the heart of fruit fly surveillance at the national and regional level.

The large-scale dissemination of innovations and the structuring of a control / surveillance system are part of the continuity of the actions already undertaken in the previous phase. Several actions will contribute to this. First, after demonstrating the effectiveness (including criteria for price / quality ratio and environmental impact), the project will support product registration. The results and techniques developed should then be widely disseminated throughout the countries of the sub-region. The priority of the action is to train producers and support them in the application of natural and inexpensive control techniques in order to increase the added value of the mango produced and increase farm gate prices.

Second, the project will support the inclusion of producers in exchange platforms with exporters and in mango inter-branch organizations in order to enable them to better defend their interests; and will support the operationalization of internal control systems in production activities and the organization of producers at the level of production basins, in order to prevent inappropriate behavior to destroy collective efforts.

Third, the project will aim to strengthen **national laboratories** in the target countries and in particular the National Center of Specialization in Fruits and Vegetables (CNS-FL) in Bobo-Dioulasso so that it becomes the “Regional Center of Specialization” for fruit and horticultural crops production in West Africa.

Fourth, the project will facilitate interactions with public services and politicians to promote the definition and implementation of regulations favorable to health surveillance and the financing of this surveillance.

The main risks identified that may limit the results of this project are:

- ✓ Country risks: possible political, security or health crisis within the countries of intervention; however, due to the regional nature of the project, a possible crisis in one of the countries could not call into question all the planned activities and, if necessary, part of the activities could be redeployed in other countries;
- ✓ Technical risks: related to the appropriation by producers of control techniques developed by research and of the monitoring system; to do this, the training will emphasize the long-term benefits of the system so that the producers supported through the training will not stop their approach after the implementation of the project;
- ✓ Institutional and legal risks: due to the fact that ECOWAS is not yet accredited to directly receive and implement EU funding (although institutional reform is underway to remove this constraint). At the national level, although the 11 NCs supported by the PLMF are fully operational, the main risk concerns the structures of the 4 countries not covered by the PLMF which will be given special attention by the project;
- ✓ Environmental, climatic and social risks: thanks to a low recourse to chemical inputs, to the support from the value chain, to the organization of producers and to the increase in their incomes and to awareness of the risks, the project will have a positive environmental and social impact.



However climate change could have a negative long-term impact on the mango sector in West Africa.

Main activities

RAD component - Research - Action - Development

This component will make it possible to respond to result 1 by establishing close links between research, innovation, training and development. To achieve this, the main activities of the component are as follows:

- ✓ Support for the regional reference laboratory (CNS-FL) in its role of regional coordinator
- ✓ Support for research protocols and dissemination of research results
- ✓ Support for national laboratories
- ✓ Monitoring and monitoring of the component (ARAA - Regional Agency for Agriculture and Food)

ASN component - Support for national public-private coordination structures

This component should make it possible to respond to result 2 via the coordination of activities at the national level. The National Committees (NCs), set up and supported in 11 ECOWAS countries during the implementation of the PLMF, will thus be strengthened in their role and will work in a close and coordinated manner with the private sector and their National Research System. Applied (NARS) respective. They will be directly responsible for advocacy activities in their states and will also have to organize the various training cycles for producers, state officials, public and private sector personnel. They will also ensure the monitoring and evaluation of national activities. Thus, the main activities of the component are as follows:

- ✓ Support to National Committees (NCs) in their day-to-day operation, their activities of supervision of activities in the field and coordination with their national and regional strategy, as well as participation in regional meetings for annual programming and campaign assessment, support for the organization of general assemblies and the organization of national consultation meetings of public / private decision-makers.
- ✓ Strengthening national capacities on phytosanitary standards and risks, through training for the Plant Protection Departments (DPV), Producer Organizations (PO) and border post staff, as well as control and phytosanitary inspection services.
- ✓ Structuring of the mango sector at national and regional level and sustainability of financing, through the establishment of partnerships with input suppliers and the establishment of appropriate mechanisms and instruments for financing the sector.
- ✓ Monitoring and monitoring of the component (ARAA)

VAS component - Surveillance - Watch - Early warning

This component should make it possible to respond to result 3 via the consolidation and extension of the surveillance and early warning system developed within the framework of the implementation of the PLMF, by involving and mobilizing all the stakeholders concerned by the problem of fruit flies, and in particular farmers and the private sector, research centers and plant protection services, in the field and in the long term at all levels (regional, national, local).

- ✓ Extension of the surveillance system to 15 countries through the development of multi-year surveillance plans in all countries (multi-year surveillance plans represent strategic documents for countries, consistent with the regional strategy, but also of tools for implementing activities,); as well as the identification of orchards and collection points and the training of producers in surveillance in favor of the four entering countries.
- ✓ Collection and analysis of surveillance data in order to model and predict infestations and to launch and monitor alerts.
- ✓ Monitoring and monitoring of the component (ARAA)

CSE component - Coordination - Monitoring - Evaluation



This last component will make it possible to coordinate activities at regional and national levels. The main activities will focus on overall coordination, monitoring-evaluation and audit activities, and project communication and visibility.

Organization

This is a financial support in the form of a subsidy to the Regional Plan for the Control and Fight against Plant Diseases and Pests and is implemented by the **Economic Community of West African States (ECOWAS)**. The management of the European Commission' funds will be done through a delegation of funds entrusted to AFD, which will also co-finance the Action. The **ECOWAS Commission**, through ARAA, will assume the function of **contracting authority**.

The project is implemented under the aegis of the Regional Agency for Agriculture and Food (ARAA) of ECOWAS, based in Lomé, Togo. For the regional component, the Regional Agency for Agriculture and Food (ARAA) will recruit the technical coordination team for the Action. A grant agreement will be signed between ECOWAS and CNS-FL for the implementation of the RAD component.

Regarding the implementation of national activities, these will be directly managed and coordinated by the **National Committees (NCs)** - mixed body with alternate presidency (public / private) - in the different countries, with which ECOWAS will sign grant agreements. More specifically on the action-research - evelopment component, **the National Center of Specialization in Fruits and Vegetables (CNS-FL) of Bobo-Dioulasso**, supported by **the Royal Museum for Central Africa of Belgium**, will coordinate research activities at the regional level. and will support the requesting **National Agricultural Research Systems (SNRA)** via a Technical Committee. Support will be at the request of countries on a case-by-case basis.

In addition, the **CNS-FL and the Senegalese SNRA** will strengthen their collaboration with the Center for International Cooperation in Agronomic Research for Development (**CIRAD**) for which ad hoc support missions will be organized and the development of new partnerships will be encouraged. Each NARS in its country will work in close collaboration with CN so that the research carried out is made available to producers. Other partnerships may be established with other research institutions such as the West and Central African Council for Agricultural Research and Development (CORAF) and IITA.

The **Scientific Committee**, which brings together, among others, CORAF (West and Central African Council for Agricultural Research and Development), **ICIPE, CIRAD, the Royal Museum for Central Africa, IITA**, etc. will carry out consultancy activities with the RAD Component. It will review the research options (technical and financial proposals) which will be submitted to it by the CNS-FL on an annual basis and will give an opinion on the priority of the most promising proposals with regard to the targeted objectives of effective and inexpensive control. .

Finally, the Action will evolve under the recommendations of a Steering Committee bringing together all stakeholders. It will be chaired by the ECOWAS Commission. A representative of the UEMOA Commission will be systematically invited. Within this Committee, care will be taken to maintain close coordination between the actions of the Action, while working to harmonize the policies and interventions of the two institutions in terms of the prevention and control of fruit flies. in west Africa. The Committee will validate the main orientations of the Project and approve the reports and annual action plans.

Implementing organization

The project is implemented under the aegis of the Regional Agency for Agriculture and Food (ARAA) of ECOWAS, based in Lomé, Togo.



Partners

- ✓ The National Fruit and Vegetable Specialization Center (CNS-FL) of Bobo-Dioulasso,
- ✓ The Royal Museum for Central Africa in Belgium,
- ✓ National Agricultural Research Systems (SNRA)

Other stakeholders

- ✓ The Center for International Cooperation in Agronomic Research for Development (CIRAD)
- ✓ THE West and Central African Council for Agricultural Research and Development (CORAF)
- ✓ The International Center for Insect Physiology and Ecology (ICIPE)
- ✓ The International Institute of Tropical Agriculture (IITA)

Region

15 ECOWAS Member States: In the first phase of the project, the countries supported were: Benin, Burkina Faso, Ivory Coast, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Nigeria, Senegal and Togo. In the second phase, the following countries were integrated into the project: Cape Verde, Liberia, Niger and Sierra Leone.



Funding and co-funding

EE (95%)	€ 7,500,000
AFD	€ 3,935,000
Total budget	€ 11,453,000



Duration

48 months (mid 2020- mid 2024)

