



CALL FOR EXPRESSIONS OF INTEREST

Recruitment of an individual consultant for a study on the development of mango by products in West Africa

Opening of the call: 16 / 10 / 2017

Closure of the call: 31 / 10 / 2017

CEI No 21-2017

1. The support project to the regional plan for fruit flies monitoring and control in West Africa is the culmination of a long concerted effort between ECOWAS, WAEMU and mango-exporting countries. It was started in 2008 by the Rural Development and Agriculture Directorate of the ECOWAS Commission. ECOWAS initiated this project to combat the issue of fruit flies at the regional level, through coordinated effort, and at the national level, by pooling strategic approaches, surveillance and combat methods, and disseminating research findings evenly across countries affected by the problem. The project is in line with the implementation of RAIP, which, in the ECOWAS member countries, falls under the national agriculture, food security and nutrition investment plans. It is specifically identified in component 2 of RAIP.
2. The overall goal is to improve incomes for fruit and vegetable producers, thereby contributing to food security and poverty reduction in the sub region.
3. The tasks to be performed and other information relating to the conduct of the mission are detailed in the attached Terms of Reference.
4. The Executive Director of CORAF/WECARD invites consultants with the profile sought as indicated in the terms of reference to express their interest in this appeal.

5. Individual consultants should provide a record of expression of interest consisting of: (i) the methodology to be used to do the work requested, (ii) references concerning the performance and experience of similar services, (iii) and their updated CV.
6. The consultant will be selected in accordance with the procedures defined in CORAF/WECARD Procedures Manual”.
7. Interested consultants may obtain additional information from CORAF/WECARD Executive Secretariat by sending correspondence farma.cisse@coraf.org with copy to secoraf@coraf.org from 8am to 12pm and from 15h to 17h GMT.
8. Expressions of interest must be submitted by e-mail to: procurement@coraf.org , on **31/10/2017** at 17:00 GMT at the latest.

Dr Abdou TENKOUANO
Executive director
CORAF / WECARD

Conseil Ouest et Centre Africain pour la
Recherche et le Développement



West and Central Africa Council for
Agricultural Research and



**PROJET DE SOUTIEN AU PLAN REGIONAL DE LUTTE ET
DE CONTRÔLE DES MOUCHES DES FRUITS
EN AFRIQUE DE L'OUEST**

Terms of reference



1. General information

Recruitment of a consultant for a study on the development of mango by-products in West Africa

1.1 Background

Fruit flies are a deadly threat to the survival of the fruit and vegetable sector, which contributes to balanced diet and food security of millions of people, and is

also a major source of foreign exchange for countries. Every year, fruit flies cause billions of euros in losses worldwide. Interceptions at European Union borders have led to heavy losses for West African countries.

Mangoes are not the only prey to fruit flies. Indeed, the fruit and vegetable sector as a whole is at risk from these flies, as they attack different species of fruits and vegetables. Since 2004, several West African countries have increasingly been seeing a good portion of their exports rejected by the European Union and other major markets, owing to the presence of larvae and fruit flies, considered by FAO as quarantine insects.

Female fruit flies lay their eggs in the parenchyma of fruits; the larvae, which hatch from the eggs damage the fruits as they feed on them. Mangoes suffer 80 to 100 per cent losses during the rainy season. At the start of the rainy season therefore, exports have to be halted, even when most of the produce has not been harvested. Worse still, the introduction and dispersion of invasive species (*Bactrocera invadens*) led to even greater losses.

That is why under the ECOWAS Agricultural Policy (ECOWAP)/Comprehensive Africa Agriculture Development Programme (CAADP)), the implementation of a fruit fly control plan has been specifically identified under component 2 of the Regional Agricultural Investment Plan (RAIP) as a priority for the National Agriculture, Food Security and Nutrition Investment Plans for ECOWAS member countries, comprising a fruit and vegetable exports sector that is already structured or in process. This ECOWAS regional agricultural policy is supported by the West Africa Regional Indicative Programme (RIP) of the 10th European Development Fund (EDF) for promoting regional projects to support (i) natural resource and agricultural development, processing and management; and (ii) productivity and competitiveness of priority agricultural sectors.

1.2 Specific project context

The support project to the regional plan for fruit flies monitoring and control in West Africa is the culmination of a long concerted effort between ECOWAS, WAEMU and mango-exporting countries. It was started in 2008 by the Rural Development and Agriculture Directorate of the ECOWAS Commission. ECOWAS initiated this project to combat the issue of fruit flies at the regional level, through coordinated effort, and at the national level, by pooling strategic approaches, surveillance and combat methods, and disseminating research findings evenly across countries affected by the problem. The project is in line with the implementation of RAIP, which, in the ECOWAS member countries, falls under the national agriculture, food security and nutrition investment plans. It is specifically identified in component 2 of RAIP.

The project, totaling €23.5 million, is funded by European Union (EU) to the tune of €17 million, the French Development Agency (AFD) €1.5 million, the ECOWAS Commission and the recipient States to the tune of €5 million. AFD will be responsible for the project for all donors. The project will be implemented over a period of 60 months, from the

date the agreement is signed with ECOWAS, and completed no later than 19 August 2019.

Overall goal: Improve incomes for fruit and vegetable producers, thereby contributing to food security and poverty reduction in the subregion.

Specific goals:

- Increase volumes of fruits free of infestation in local markets, thereby contributing to food security for the people;
- Control fruit and vegetable losses caused by fly infestation to prevent export constraints;
- Transpose measures taken to combat flies into other areas or even regions subject to plant health risks;
- West Africa area, ECOWAS to strengthen its role as the driver of its sectoral policy.

2. Mission background and goals

2.1 Background

The project has five components: Control, capacity building, surveillance, coordination and applied research. Applied research, managed by CORAF/WECARD, has three major research areas:

- **RCH1: Integrated Pest Management research, biological controls, control products, development of manuals on new processes available**
- **RCH2: Introduction of a centralized information network, accessible via internet**
- **RCH3: Dissemination of research findings through seminars, brochures and documents**

Mangoes that fall on the ground in the orchards and are not suitable for consumption are left in a pile, leading to fruit fly infestation. The integrated control approach encourages orchard maintenance through frequent and thorough gathering of fallen mangoes, as soon as the fruits start forming, followed by destruction of the flies by exposure to the sun in black plastic bags or incineration in holes dug in the orchards.

Work on the development of mango by-products starts with the preparation of compost using the skin and pulp of the mango, or fuel briquettes from the pit. PAEPARD provided support for non-food development projects for mangoes (for cosmetics, bioenergy, compost and cattle feed).

The development of mango by-products has a huge economic potential for the people of West Africa, especially women, who are usually left out of the production

process, except to gather the fallen fruits. However, the problem remains unsolved in most African countries, with dispersed results, often not accessible to producers.

Against this backdrop, it is crucial to assess technology that would be appropriate for developing mango by-products in West Africa, so as to improve production, generate employment and thereby incomes for beneficiaries.

2.2 Mission goals

The general goal is to contribute to improving the incomes of producers by (i) identifying and characterizing various features of technologies/processes of mango by-products; (ii) assessing their performance and feasibility in West Africa; and (iii) identifying how to create synergy between the activities of the current project and those of ongoing activities

Specifically, it entails:

1. Identifying various processes/technologies for developing mango by-products in countries involved in the implementation of the project, namely Benin, Burkina Faso, Cote d'Ivoire, the Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Nigeria, Senegal and Togo;
2. Mapping the areas for applying the processes/technologies for developing mango by-products in these countries
3. Describing, characterizing and analyzing the performances of various processes/technologies identified;
4. Identifying and describing the various stakeholders involved in the area of developing mango by-products and those unsuitable for consumption, their strengths and weaknesses;
5. Identifying and proposing synergy activities to improve the integrated management of fruit flies developed in the project.

3. Expected results and deliverables:

- Analysis of various processes/technologies for developing mango by-products: comprehensive inventory, description, area, strengths and weaknesses, impact on fruit flies, especially on *Bactrocera invadens*, yield, stakeholders involved;
- Suggestions, proposals and recommendations on the various forms of developing mango by-products, suitable for dissemination in West Africa
- Equipment needed to improve services of those involved in the development of mango by-products and mangoes unsuitable for consumption;
- Proposals for training people involved in the development of mango by-products in West Africa.

4. Organization of work plan

The consultant will work in close collaboration with the applied research component officer in Senegal (CORAF/WECARD), the coordination unit based in Mali, the scientific committee and the technical committee of the project.

The consultant selected after evaluation of proposals shall draw up a work plan showing all the assignments to be carried out and shall propose a method, timetable and financial proposal for carrying out the project.

The duration of the activities shall be 30 working days, starting from the signature date of the contract.

5. Timetable and reports

The Consultants selected shall present their work method for approval

They will produce a start-up report for CORAF/WECARD

They will also present an interim report at a validation workshop on the study, during which they will receive comments from participants.

A final report detailing all the suggestions from the validation workshop will be provided.

6. Profile of consultant

Qualifications:	Holder of higher degree – Masters or PhD in: Agronomy, Earth Sciences, Entomology, Agro-economy, Agricultural products processing
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General professional experience	<ul style="list-style-type: none">• At least seven years' experience in rural and agricultural development, and the fruit sector in particular• Knowledge in area of development of agricultural by-products• Good knowledge of the regional and international context in the area of research and agricultural development• Proven knowledge of support from various organizations for implementing action plans
Specific skills	<ul style="list-style-type: none">• Good programming and forecasting skills• Good skills in drafting reports and summary reports• Availability during mission period