



CEDEAO
Communauté Économique des
États d'Afrique de l'Ouest

ECOWAS
Economic Community of
West African States

Conseil Ouest et Centre Africain
pour la Recherche et le
Développement Agricoles



West and Central African Council
for Agricultural Research and
Development

Biotechnology and Biosafety Program

Call for proposals for the organization of regional trainings on « strengthening the capacities of researchers and technicians of ECOWAS countries in Biotechnology and Biosafety »

Introduction

Since the Sacramento (USA) Summit in June 2003, West Africa is exploring ways of using appropriately biotechnology to improve agricultural productivity and reduce nutritional and food insecurity as well as poverty. Indeed, recommendations were formulated during this summit in order to facilitate access of the Developing Countries to new agricultural and alimentary technologies with the goal of realizing the objective of the World Food Summit which is to reduce by half, hunger in the world by 2015.

To follow up on these recommendations, a West African Regional conference was held in June 2004 in Ouagadougou (Burkina Faso). The theme of the conference was: "Mastering Science and Technology to increase agricultural productivity in Africa: perspectives for West Africa". The conference highlighted, among other issues, the necessity to establish: 1) a Public Information Service on Biotechnology in West Africa, 2) a partnership between the West African Research institutions and their counterparts from the northern countries, particularly with those from the USA, 3) a West African Centre of Biotechnology. The conference also decided to organize a Ministerial Conference on Biotechnology under the auspice of ECOWAS in Bamako (Mali), in order to adopt the framework on an Action Plan to promote biotechnology and harmonize regulations on biosafety, and institutionalize a West African Ministerial Conference on Biotechnology, as a first step toward the creation of an African Ministerial Conference.

In this perspective, the second ECOWAS Ministerial Conference on Biotechnology and Biosafety, held in Bamako in June 2005, has defined the global orientations on an Action Plan and decided to institutionalize a regular ministerial conference on Biotechnology. The conference also commissioned the ECOWAS commission, in relation with CORAF/WECARD and INSAH/CILSS, to finalize and circulate a detailed Action Plan for the implementation of its recommendations.

This Plan was elaborated through a participatory approach involving WAEMU and regional networks working in that field. The "Action Plan for the Development of Biotechnology and Biosafety in West Africa" (APDBBWA) includes 3 Operational Objectives: 1) the development of Biotechnology Product in the ECOWAS region to

improve agricultural productivity/competitiveness and sustainably manage the genetic resources, 2) the implementation of a regional approach in Biosafety, 3) putting in place an efficient mechanism for coordination, Monitoring and Evaluation as well as funding.

The Plan was validated by the regional experts and adopted by the Ministers during the 3rd Ministerial Conference held in May 2007, in Accra (Ghana).

In view of its specific mandate in the region, CORAF/WECARD was commissioned by ECOWAS to implement the Specific Objective 1 and some activities under the Specific Objective 3 of APDBBWA.

During the last twenty years, the development of biotechnology has significantly improved the understanding of living species. The knowledge generated have contributed to the development of more efficient technologies for better characterization and conservation of species and also allowed the development of new methods for the control of diseases and biotic constraints affecting cultivated plant species and animals breeds. Nowadays, most of the common technologies used to improve agricultural productivity are well mastered and are widespread. Unfortunately, they are still not currently applied in agricultural research and development programs in West Africa, even though most experts agree that modern biotechnology can significantly contribute to the achievement of the development goals defined within the national agricultural productivity frameworks as well as regional policies such as the ECOWAS Agricultural Policy (ECOWAP). The reasons for the weak adoption of biotechnologies in the region lies, among others, in the insufficiency of funding, qualified human resources and well equipped laboratories of excellence as well as lack of an institutional framework for capacity strengthening in Biotechnology.

In order to address these insufficiencies, ECOWAS has commissioned CORAF/WECARD to develop an Action Plan for the Development of Biotechnology and Biosafety in West Africa (APDBBWA), within the frame of the convention signed between the two institutions designating CORAF/WECARD as a technical arm of ECOWAS for the implementation of its agricultural policy. CORAF/WECARD was therefore the main actor of the APDBBWA's development and has actively participated in the initiatives and sensitization workshops that finally led to the adoption of this plan by the ECOWAS Ministers in charge of Agriculture, in may 2007. Moreover, CORAF/WECARD has put in place a Biotechnology and Biosafety Program with the goal of promoting the use of biotechnology in West Africa through the sensitization of decision makers and the extension of the new biotechnology tools. This program stands on a platform of partner institutions having technical capacities in Biotechnology. Given the very rapid growth of biotechnology, scientific and technical capacity strengthening becomes indispensable in making this platform functional.

The APDBBWA has clearly identified human capacity strengthening as one of the priority actions to undertake in the logic of progressively developing local competencies and putting in place an effective biotechnology research teams in West Africa. The present project aims at implementing an APDBBWA capacity strengthening activity for researchers and technicians in biotechnology.

Objective of the training

The objective of the proposed training is be to contribute to the improvement of the technical and operational capacities of researchers and technicians within the biotechnology sector in West Africa.

Outcome

At the end of the trainings, at least twenty researchers and/or technicians of the West African region working in the area of biotechnology would have had their capacities strengthened in the use of modern agricultural biotechnology and biosafety tools. In particular, they will be able to:

- Explain the basic principles of molecular biology and plant tissue culture
- Explain what a GMO is and how it is constructed
- Apply modern biotechnology tools to plant breeding, plant and animal protection and to agricultural productivity improvement
- Identify and analyze GMOs

Content of the training

The proposed training activities should be articulated around the following themes:

- Basic principles of Molecular Biology and *in-vitro* Tissue culture
- Common methods used in Marker Assisted Selection, the Characterization and Conservation of Genetic Diversity ;
- Modern methods for detecting and studying pathogens
- Methods of *in-vitro* sanitization and multiplication of plant species
- Principles and practices in Genetic Engineering, Construction and detection of GMOs.

The training would be done through theoretical (40h of teaching) and practical (40h of laboratory work) sessions.

Beneficiaries

The number of participant would be 20. They will be selected by CORAF/WECARD from the 15 ECOWAS countries on the basis of the quality of their proposal and the relevance of their application for the priority research area of the region. Target trainees will be researchers or Technicians who are already involved in conducting biotechnology activities but need improvement and updating of their knowledge to efficiently perform their duty. These trainings should help them in addressing major agricultural constraints in their particular field

Duration

The duration of the training would be 20 days.

Profile of the Principal Applicant

The principal applicant of the proposal must have the following minimal profile:

- Be an employee in an ECOWAS country's research institution or university ;
- Have at least a PhD degree in Biotechnology or a related qualification (Molecular Biology, Cell Biology; Plant Physiology; Biosafety, etc.);
- Have a good knowledge of Biotechnology issues in general and GMs in particular as well as in specific issues related to biosafety.
- Have at least 10 years of experience in working in Research and Development and/or teaching biotechnology or a related field at the university, half of which must have been spent in West Africa ;
- Have a good knowledge in the regional and international contexts in biotechnology and biosafety ;
- Have a good knowledge of the capacity building needs of West African researchers and technicians in Biotechnology ;
- Have a good knowledge of the Cartagena Protocol on Biosafety as well as the methods of risk evaluation related to LMOs;
- Have a good experience in environmental impact studies
- Muster and be capable to work in English and French ;
- Be available for the training period proposed.

Selection procedure

The applicants will be selected in conformity with the guidelines for the selection and hiring of consultants by employees. The selection will be conducted according to the Individual Consultant Selection procedures.

The deadline for submission of the proposal is the 15th of March, 2010.

The application dossier must comprise:

- Letter of motivation from the principal applicant

- Detailed curriculum vitae including the full address of the Principal applicant (post and electronic addresses, telephone and fax number, etc.)
- A brief description of the hosting institution highlighting its capacities to effectively conduct the training
- A letter of support from the head of the hosting institution
- A technical proposal
- A financial proposal

The application dossier must be sent to:

The Executive Director of CORAF/WECARD
Executive Secretariat of CORAF/WECARD
7 Avenue Bourguiba, BP 48
CP 18523 Dakar, Sénégal

Or, sent by electronic mail to: secoraf@coraf.org.

Only short listed candidates will be contacted