

WP Board No. 878/00 (E)

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Projects/Common Fund

PROJECT PROFILE PROPOSALS

INTEGRATED MANAGEMENT OF
COFFEE WHITE STEM BORER
(INDIA, MALAWI AND ZIMBABWE)

Executive Board
15 - 18 May 2000
London, England

PROJECT PROFILE PROPOSALS

I. Integrated management of coffee white stem borer

1. The Executive Director has received a draft preliminary project profile for the integrated management of the white stem borer, a serious pest of coffee in some countries. Based on previous experience of CFC projects, the project will include a limited number of countries with three principal countries: India, Malawi and Zimbabwe. The budget will be funded in its main components by a grant from the CFC with a counter-part funding from the two countries where the project would be implemented. The Project Executive Agency is CABI Bioscience which will be seconded by national project leaders within the participating institutes appointed for the purpose of running the programme activities.
2. The Organization has already consulted the Secretariat of the Common Fund for Commodities (CFC) with regard to this project and if the Board wishes to approve this project outline in principle, bearing in mind that further work will be needed, a profile will be submitted for consideration by the Consultative Committee at its meeting in July 2000.
3. Members should note that more complete version of the project profile is available in English to Members on request.

I. Summary of the project

The International Coffee Organization (ICO) hereby submits the following pilot project proposal with its recommendation for financing through the Second Account of the Common Fund for Commodities (CFC). The proposal will be submitted to the Executive Board of the International Coffee Organization for its approval on _____ 2000 following the recommendation of the Executive Director of the International Coffee Organization.

Project title:	Integrated management of coffee white stem borer
Duration:	Four years
Location:	Coffee growing regions of India, Malawi and Zimbabwe.
Nature of the project:	This pilot project aims to contribute to expand research and development of Integrated Pest Management (IPM) measures for combating white stem borer with least dependence on chemical pesticides which will result in reducing the adverse effects of pesticide application on resistance, human health, the environment and protecting the ecosystem in the plantation areas.
Objective and Scope Of the project:	<p>According to history, Arabica coffee was introduced in to India some time during 1600 AD. Presently coffee cultivation in India covers a total area of around 0.305 million ha of which Arabica and Robusta accounts for nearly 50 % each and is confined to mostly to the hilly tracts of the Western and Eastern Ghats covering Karnataka, Kerala and Tamil Nadu forming the traditional tracts and to a small extent in nontraditional eastern hill ranges covering Andhra Pradesh, Orissa, West Bengal and the North Eastern States. Coffee in India is one of the major industries contributing substantial foreign exchange to the national exchequer, a source of direct employment for about 0.4 million people in the area of cultivation and to several thousands in processing and trade sectors. Coffee cultivation is also instrumental in preserving the precious forest ecosystem in traditional areas, while in non-traditional areas, coffee cultivation has helped to control the denudation of forest ecosystems due to shift cultivation. Coffee white stem borer, <i>Xylotrechus quadripes</i> (Coleoptera: Cerambycidae) is the most destructive pest of Arabica coffee in India. It is now also starting to attack Robusta coffee. The borer completes its life cycle in about a year.</p>

Apart from **India**, this pest occurs in **Vietnam, Sri Lanka, Thailand** and **China**. Another similar pest, *Monochamus leuconotus* occurs in Southern Africa, where it is also a major

problem. In order to combat these pests and to contribute to a reduction in environmental and public health hazards through reduction in the use of toxic chemicals and hence protect against possible adverse publicity in the media, there is an urgent need to evolve an effective integrated management package. In the case of India considerable previous basic research has yielded a powerful attractant (pheromone) which now needs to be produced and tested on a large field scale. These advances in India can be used as a model for the cases of Malawi and Zimbabwe. The project will seek to

- i) Identify of shortcomings and optimize present practices with currently available technology. Indian experiences will be shared with African participants.
- ii) Develop new technologies in pest management, especially use of bio-control agents like parasitoids, fungal pathogens, nematodes and pheromones (for Malawi).
- iii) Impart training to extension workers on farmer participatory extension programmes.
- iv) Produce documentation, which will make the technologies widely available to coffee growing countries of SE Asia not directly participating in the project.

In order to achieve these objectives, the project will include the following components:

- 1) **a Farmer-oriented set of studies** to optimize short to medium term solutions with direct farmer interaction at all stages,
- 2) **a set of Pest and natural enemy studies** to develop new methods of control through a longer-term research-led strategy
- 3) **large scale trap trials** in order to develop the existing pheromone to the pre-commercial stage
- 4) **dissemination information phase** and
- 5) **administration, monitoring and evaluation** of the project

Estimated total cost: To be determined

Financing sought from the Common Fund: Grant

Counterpart contributions Collateral counterpart Contribution US\$ (%)
US\$

Project Executing Agency: CABI Bioscience, Egham, UK

Supervisory Body: International Coffee Organization

Collaborating institutions: Coffee Board (India); Ministry of Agriculture and Irrigation (Malawi); Ministry of Lands and Agriculture (Zimbabwe)

Estimated starting date: