Regional Project in Africa


Presented by Tony Cudjoe, Cocoa Research Institute of Ghana (CRIG), Regional Project Co-ordinator
INTRODUCTION:

- About 30 - 40% of global annual cocoa production is lost to insect pests and pathogens.
- At local level, the situation can be so severe that farmers report total yield losses.
- There is an increasing threat of the spread of cocoa pests and pathogens to the African continent with devastating consequences for an area that accounts for more than 70% of total global cocoa production.
Apart from indigenous pests and diseases, introduction(s) of exogenous pests and diseases from Latin America and Asia to West Africa remains an essential threat with potential devastating consequences.

Another emerging threat to cocoa production in Africa is parasitic plants such as mistletoes and epiphytes.

Controlling these pests, diseases and parasitic plants will be the main focus of the project.
World cocoa production in 2010/11 (ICCO statistics, 2012)

WORLD COCOA PRODUCTION
2010/11: 4.2 million tonnes

Latin America: 13%
(550,000 tonnes)

Africa: 74%
(3.1 million tonnes)

Asia & Oceania: 13%
(550,000 tonnes)
Participating countries in the project:

- Nigeria
- Ghana
- Togo
- Côte d'Ivoire
- Cameroon
IMPLEMENTATION PARTNERS:
Cameroon
Institute of Agricultural Research for Development (IRAD), Cameroon

Côte d’Ivoire
Centre National de Recherche Agronomique (CNRA), Côte d’Ivoire

Ghana
Cocoa Research Institute of Ghana (CRIG), Ghana

Nigeria
Cocoa Research Institute of Nigeria (CRIN), Nigeria

Togo
Institut Togolais de Recherche Agronomique (ITRA), Togo
PROJECT OBJECTIVES:

Main objective is to increase productivity on cocoa farms and enhance cocoa producers’ incomes by reducing crop losses caused by indigenous insect pests and diseases, as well as to prevent the introduction of non-indigenous cocoa pests from other cocoa producing countries or regions.
SPECIFIC OBJECTIVES

i. Management of endogenous cocoa pests and diseases

ii. Setting up early warning systems, emergency programmes and national plans for the prevention and management of all cocoa pests and pathogens including exogenous.

iii. To strengthen in-country and regional capacity for improved pest surveillance by disseminating information on the prevention, early detection, eradication and continued management of existing and invasive cocoa pests and pathogens.
PROJECT COMPONENTS:

*Component 1:* Integrated management of endogenous cocoa pests and diseases (Black pod, CSSVD, Mirids, Sting Bugs, Stem Borers and Parasitic plants);

*Component 2:* Early warning systems, emergency actions and national plans for the prevention and management of cocoa pests and pathogens;
PROJECT COMPONENTS (Cont.):

*Component 3:* Project Evaluation and dissemination workshop;

*Component 4:* Project management, coordination and supervision
ENDOGENOUS PESTS TARGETED:

- Black pod and Cocoa swollen shoot virus as the main diseases.

- Parasitic plants such as mistletoes are gaining prominence.

- Cocoa insect pests such as mirids, stink bugs and stem borers are considered for control under the project.
Indigenous insect pests of cocoa

Adult *Distantiella theobromae*
Adult *Sahlbergella singularis*
*Helopeltis* sp. (cocoa mosquito)

Circular feeding lesions on cocoa pods
Adult *Bathycoelia thalassina*
Larva of cocoa stem borer
Indigenous pathogens of cocoa

*Phytophthora palmivora*

*Phytophthora megakarya*

Cocoa plant showing the swollen shoot disease transmitted by the cocoa mealybugs.

Damaged pods due to black pod disease.
EXOGENOUS PESTS TARGETED

- Pathogens such as witches’ Broom, *Moniliophthora perniciosa* and frosty pod *Moniliophthora roreri* are not in Africa now but are of major concern to the project.

- Witches’ Broom (WB) disease causes an estimated crop loss of about 20% in the region where it occurs.

- In Brazil, the introduction of this pathogen into the state of Bahia during the 1980s, reduced production to about 125,000 tonnes of cocoa, as against an initial projection of one million tonnes per year in 2000, with Brazil effectively becoming a net cocoa importer.
EXOGENOUS PESTS TARGETED

- The Asian Pod Borer *Conopomorpha cramerella* is an insect pest of major concern to the project.

- This pest causes substantial losses to the cocoa sectors in Malaysia, Indonesia and the Philippines.

- In Sulawesi, 20% losses have been frequently recorded, while in some areas, 40 to 50% losses have been registered.

- Since 2006, the pest has invaded the cocoa growing areas of Papua New Guinea and management of this pest has become a national cocoa sector concern.
Exogenous pest and pathogens of cocoa

- Frosty pod rot *Moniliophthora roreri*
- Witches' broom cushion gall
- Asian CPB: characteristic mottling of pod
- Adult CPB: in typical resting position underneath a horizontal branch
- Internal infestation
OUTPUTS/MAIN ACTIVITIES:

- Develop, demonstrate and train farmers on efficient and sustainable IPM techniques to reduce the spread of pests & diseases of cocoa;

- Produce and distribute technical manuals and information tools (including posters, leaflets and DVDs) on IPM to farmers and plant health inspectors;

- Train staff at ports, land borders and airports on ways to recognize specific pests and set in place effective quarantine measures to prevent their spread;
OUTPUTS/ACTIVITIES (Cont.):

- Develop national and regional early warning systems and procedures for the on time detection of pests and pathogens and the necessary emergency actions and plans for their eradication or control;
- Hold two regional workshops one in Abidjan and one in Accra to raise awareness on the incidence, severity, damage caused by indigenous cocoa pests and disease and sustainable control measures.
PROJECT DURATION, COST AND FINANCING.

- The project is scheduled to go for 48 months beginning in November 2012.

- It is estimated at a total cost of USD 3,121,073.

- The requested CFC grant contribution amounts to USD 1,232,102 (39%) of which USD 615,000 will be provided from the contribution of the OPEC Fund to CFC’s second account resources.

- External co-financing to an amount of USD 676,043 (22%) is presently being sought from the cocoa and chocolate industry.

- The envisaged counterpart contributions from participating countries in cash and kind, amount to USD 937,724 (30%) and USD 275,205 (9%) respectively.
## Summary of Financing Plan by Component and Source in US $

<table>
<thead>
<tr>
<th>Component</th>
<th>CFC Grant</th>
<th>External Co-financing</th>
<th>Counterpart Contribution</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
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</tr>
<tr>
<td>1  Integrated Management of Endogenous Cocoa Pests and Diseases</td>
<td>380,163</td>
<td>311,850</td>
<td>291,396</td>
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<td>2  Early Warning Systems Emergency Actions and National Plans for the</td>
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<td>226,538</td>
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<td>Prevention and Management of Cocoa Pests and Pathogens</td>
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<td>3  Project Evaluation and Dissemination Workshop</td>
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<td>-</td>
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<td>4  Project Management, Coordination and Supervision</td>
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<td>137,655</td>
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<td>151,200</td>
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<td><strong>Grand Total</strong></td>
<td><strong>1,232,102</strong></td>
<td><strong>676,043</strong></td>
<td><strong>937,724</strong></td>
<td><strong>3,121,073</strong></td>
</tr>
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*In Cash, In Kind*
PROJECT MANAGEMENT

- COCOBOD/CRIG, as the Project Execution Agency (PEA), has appointed an International Project Co-ordinator to handle the day-to-day management and to liaise with National Project Implementing Agencies (NPIAS) in each participating country.

- The PEA will, in consultation with the National Agricultural Research Stations (NARS), facilitate the establishment of a National Project Steering Committee (NPSC) in each country.
This Committee will include representatives from different stakeholder groups such as cocoa grower associations/cooperative relevant government officials, customs, health inspectors, quarantine services, members of industry and subject matter specialists from research/academic institutions.

Each NPSC will be chaired by a National Project Co-ordinator in the country to be appointed by the PIA.
PROJECT SUPERVISION

- The Supervisory Body for the project is the International Cocoa Organization (ICCO). ICCO is a global inter-governmental organization, with a membership comprising both cocoa producing and consuming countries.

- ICCO Member countries represent almost 85% of world cocoa production and more than 60% of world cocoa consumption.
PROJECT EVALUATION

Two joint review missions will be undertaken by the SB and the Common Fund during project implementation.

- **Mid-Term Review (MTR)**
  This will take place after 24 months of project implementation.

  Its purpose is to assess the actual implementation of the project by comparing activities executed so far with the final Work Plan of the Project.

- It aims to evaluate the impact of the activities carried out on the problems identified.
PROJECT EVALUATION

- In its approach, the mid-term evaluation will cover areas such as overall project implementation, results achieved, constraints and limitations encountered, remedial measures proposed and recommendations on the future priorities and directions of the project.

- The Final Evaluation: A mission will take place at the end of the fourth year of the project.

- The SB undertakes to provide the final assessment of the project in terms of implementation, achievements, outputs and any lessons to be learned for future projects.
CONCLUSIONS

- Controlling cocoa pests and diseases remains one of the greatest challenges for a sustainable cocoa production.
- This project in West and Central Africa, will encourage the use of efficient IPM techniques and the application of “best known practices” in the rational use of pesticides for the control of weeds, pests and pathogens of cocoa.
CONCLUSIONS (Cont.)

- Farmers and other stakeholders will benefit from best known practices that meet international standards, thereby improving their export potential to consumer markets.
- The project will improve on existing linkages between national cocoa research programmes, extension services, national quarantine services and farmers.
- The project will also strengthen international co-operation on invasive pests and diseases through shared experiences with countries, where the invasive pests and pathogens already exist.
Acknowledgement

☐ This project is being financed by the Common Fund for Commodities, an inter-governmental financial institution established within the framework of the United Nations, headquartered in Amsterdam, the Netherlands, with a co-financing contribution from the OPEC Fund for International Development, based in Vienna, Austria.

☐ Chocolate industry and private entities are supporting the project immensely with pledges from Mars, CAOBISCO, CRUK, BDSI and Kraft.

☐ Last but not the least the Governments and good people of the participation countries.