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# RAISE PLUS TASK ORDER: SHORT-TERM TECHNICAL ASSISTANCE IN BIOTECHNOLOGY

ANNUAL PROGRESS REPORT: OCTOBER 2006–SEPTEMBER 2007

TORFP NO. M/OAA/EGAT/EMD-05-1263

**SEPTEMBER 2007**

This publication was produced for review by the United States Agency for International Development. It was prepared by DAI Washington.

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# CONTENTS

<b>CONTENTS</b> .....	<b>1</b>
<b>INTRODUCTION</b> .....	<b>2</b>
<b>COMPLETED ACTIVITIES</b> .....	<b>3</b>
<b>YEAR 1: OCTOBER 2005–SEPTEMBER 2006 (RECAP)</b> .....	<b>3</b>
Bio-engineered cotton in Africa (A.3.2) .....	3
Regulatory Assistance (A.3.3) .....	3
Technical Assistance to food aid recipient countries (A.3.4)	4
Biosafety policy and regulatory assistance (A.3.5) .....	4
Technical conferences (A.3.6) .....	5
Trade capacity building (A.3.7) .....	5
<b>YEAR 2: OCTOBER 2006–SEPTEMBER 2007</b> .....	<b>6</b>
Bio-engineered cotton in Africa (A.3.2) .....	6
Regulatory Assistance (A.3.3) .....	6
Technical Assistance to food aid recipient countries (A.3.4)	7
Biosafety policy and regulatory assistance (A.3.5) .....	7
Technical conferences (A.3.6) .....	9
Trade capacity building (A.3.7) .....	10
<b>ONGOING ACTIVITIES</b> .....	<b>10</b>
Bio-engineered cotton in Africa (A.3.2) .....	10
Regulatory Assistance (A.3.3) .....	11
Technical Assistance to food aid recipient countries (A.3.4)	11
Biosafety policy and regulatory assistance (A.3.5) ....	13
Technical conferences (A.3.6) .....	13
Trade capacity building (A.3.7) .....	14
 <b>ANNEX 1. CONTRACT DELIVERABLES COMPLETED/IN PROGRESS</b>	<b>16</b>

# INTRODUCTION

Under the “Rural and Agricultural Incomes with a Sustainable Environment (RAISE PLUS)” IQC, EGAT has launched a three year \$3 million Task Order entitled “Short-Term Technical Assistance in Biotechnology.” RAISE PLUS services are provided by a consortium of partners consisting of Development Alternatives Inc. (DAI), Michigan State University (MSU), Agriculture and Biotechnology Strategies (AGBIOS) and the Donald Danforth Plant Science Center. The purpose of this task order is to complement longer-term biotechnology-related development efforts with short-term technical assistance in service of EGAT/ESP/IRB, USAID field missions and USAID client countries. The scope of activities covered by this task order reflects the need for rapid and targeted technical assistance to address the requests of client countries, as well as for providing a mechanism for EGAT/ESP/IRB to provide technical leadership and support to other USAID units and other US government agencies.

This report encompasses activities conducted under the RAISE PLUS Task Order: Short-Term Technical Assistance in Biotechnology (TORFP No. M/OAA/EGAT/EMD-05-1263) during the second year of the contract (October 2006–September 2007.) For an overview of all activities in relation to the contract deliverables, please see Annex 1.

## **Specific Objectives and Tasks (with contract reference number):**

- **Bio-engineered Cotton (Bt Cotton) in Africa (A.3.2)**
- **Regulatory Assistance (A.3.3)**
- **Technical Assistance to Food Aid Recipient Countries (A.3.4)**
- **Biosafety Policy and Regulatory Assistance (A.3.5)**
- **Technical Conferences (A.3.6)**
- **Trade Capacity Building (A.3.7)**

# COMPLETED ACTIVITIES

## YEAR 1: OCTOBER 2005–SEPTEMBER 2006 (RECAP)

### BIO-ENGINEERED COTTON IN AFRICA (A.3.2)

#### *Activity 2: Entomology Training in Bamako, Mali, December 2005*

Training in Entomology was conducted in Bamako, Mali in December 2005. A total of 4 participants from Benin, Burkina Faso, Chad and Mali participated along with 1 participant from Tuskegee University, USA. DAI provided logistical support by purchasing and providing air tickets for the 5 participants.

### REGULATORY ASSISTANCE (A.3.3)

#### *Activity 5: INSAH Technical Support 2*

Under this activity, DAI's implementing partner AGBIOS reviewed and provided comments on revised biosafety and seed conventions; translated revised biosafety and seed conventions from French into English; provided technical assistance to develop a workplan for the six-month period from April through September 2006; and assisted with candidate interviews to staff a regional biosafety office.

#### *Activity 9.2: Technical Assistance to Burkina Faso*

Dr. MacKenzie of AGBIOS participated in meetings with Dr. Lompo (National Biosecurity Agency) and Dr. Ouedraogo (INERA) to develop a work plan for providing technical assistance to strengthen capacity in environmental risk assessment and risk management for field trials and commercial release of transgenic products, particularly Bt cotton. His actions included meetings with Dr. Ouedraogo and Dr. Lompo regarding joint INERA – NBA cooperation in organizing a cotton producers' workshop in Bobo Dioulasso, Burkina Faso in the fall of 2006; meetings with Pr. Alassane Sere (Burkina Biotech Association) and Dr. Ouedraogo (INERA) on possible biotechnology communications activities in Burkina Faso; and meetings with CORAF to finalize the terms of reference for the biotechnology coordinator position and to discuss their involvement in the cotton producers' workshop.

#### *Activity 11: INSAH Convention Translations*

DAI arranged for the translation and review of 'Final Convention Biosecuritaire', 'Final Convention Reglement Semences', and 'Final Structure et Fonct CRC'.

## **TECHNICAL ASSISTANCE TO FOOD AID RECIPIENT COUNTRIES (A.3.4)**

No activities under A.3.4 during year 1.

## **BIOSAFETY POLICY AND REGULATORY ASSISTANCE (A.3.5)**

### *Activity 3: INSAH/CILLS Tech Support: Regional Biosafety Framework Development, January 17-19*

USAID is supporting work by INSAH to initiate a project to create a regional biosafety framework for West Africa. INSAH requested further support specifically related to an INSAH/CILSS meeting to validate the “Framework Convention Introducing a Common Biosafety Regulation in the CILS countries” and the “Framework Convention Instituting Common Regulations for Conventional and Transgenic seeds in the CILS area” in Niamey, Niger January 17-19, 2006. This request was specifically to support the translation from French into English of three draft documents (two draft conventions and an elaboration of a proposed implementing committee structure), review of the same draft documents, and participation in the January workshop of a technical resource person. Dr. Donald MacKenzie, Vice President, AGBIOS attended these two meetings. Significant progress was made during this meeting on amending both framework conventions and in confirming the desire for a regional approach to biosafety and seeds regulation.

The amended biosafety convention has included new articles dealing with foods derived from genetically modified organisms (GMOs), public access to information, and has made clearer distinctions between “contained”, “confined” and “unconfined” activities involving GMOs. The revised convention also better describes the role of the Regional Consultative Committee and the division of decision-making responsibility between national competent authorities and the regional body. Once adopted by the Council of Ministers, there will need to be additional work on developing specific protocols under the convention to deal with risk assessment criteria and administrative requirements for different levels of activity (e.g., confined field trials vs. unconfined, or general, release) and with food safety.

### *Activity 4: Translation of ECOWAS action plan for biotechnology & biosafety strategy development*

USAID supported the development of a regional strategy for biotechnology and biosafety in West Africa through a series of workshops and meetings led by CORAF that culminated in the ECOWAS Ministerial Conference on Agricultural Biotechnology, held in Bamako, Mali on June, 2005. The ministers endorsed several overarching recommendations that provided general direction for such a strategy, and recommended that an action plan be prepared to detail the way forward. ECOWAS convened a meeting in October 2005 in Abuja, Nigeria to discuss the elements of the action plan, and assigned the further development of the action plan to two consultants, who recently completed a draft which is partially in English and partially in French. This activity translated the draft “Action Plan for the Development of Biotechnology and Biosafety in Countries of the ECOWAS 2006-2010” into two complete versions in English and French. AGBIOS completed the assignment and the required deliverable before January 16, 2006.

#### *Activity 8.1 and Activity 8.2: RDMA Policy Support*

Mrs. Koch of AGBIOS participated in the ASEAN – United States Roundtable on Agricultural Biotechnology Policy and Strategy, April 4-5, 2006, in Bangkok, Thailand. She undertook a scan of ASEAN sub-regional and bilateral agriculture biotechnology-related programs in South East Asia. She assisted RDM/A to set priorities for technical assistance for regional policy cooperation in agricultural biotechnology, identify possible partners or programs to complement USAID activities and/or leverage resources, and drafted a 3-year proposal for policy support to ASEAN that will be implemented as Activity 12. Further, she helped RDM/A assess ASEAN interest in specific activities to support regional biotechnology policy development.

#### *Activity 13: West Africa Policy Support*

Dr. Potter of AGBIOS attended and participated in the Réunion sur le Projet Régional de Biosécurité en Afrique de l'Ouest in Cotonou, Benin from September 21 – 23, 2006, and produced trip notes.

### **TECHNICAL CONFERENCES (A.3.6)**

#### *Activity 1: APEC Conference on Biosafety Policy Options, Manila, Philippines, January 16 –18, '06*

APEC, in collaboration with the Department of Agriculture of the Republic of the Philippines and the U.S. Agency for International Development held the APEC Conference on Biosafety Policy Options in Manila on January 16-18, 2006. The primary target audience of the conference, which was co-sponsored by the economies of the USA, Philippines, Vietnam, Peru and Canada, included regulators, government policy makers and experts in the areas of agriculture, trade, environment, economics and foreign affairs. The conference focused on exploring policy options for biosafety regulation in the APEC region. The theme of the conference reflected one of the priorities identified in the APEC High Level Policy Dialogue on Agricultural Biotechnology (HLPDAB). Among the topics that were covered are, i) comparison of economies obligations under the WTO and the Cartagena Protocol, ii) impact of regulation on trade flow in the APEC region, iii) differing impacts and implications for importing and exporting countries, iv) biosafety regulation and socioeconomic considerations, v) regional initiatives for biosafety compliance, vi) impact of biosafety regulation on public/private research in agricultural biotechnology, and vii) economy experiences of biosafety policy development and implementation. The specific aims of the conference were to give participants a clearer understanding of the breadth of sectoral considerations embedded in biosafety policy, and to increase their understanding of the implications and options for agricultural biotechnology regulation in different sectors of government. In the longer term, it is hoped that, based on this increased understanding and sharing of experiences, APEC economies will be able to successfully meet the requirements of international agreements, thus strengthening their agricultural biotechnology sectors.

### **TRADE CAPACITY BUILDING (A.3.7)**

No activities under A.3.7 during year 1.

## **YEAR 2: OCTOBER 2006–SEPTEMBER 2007**

### **BIO-ENGINEERED COTTON IN AFRICA (A.3.2)**

*Activity 15: Burkina Faso Cotton Stakeholders Workshop – 29-31 October, 2007*

Genetically engineered cotton is spreading in spite of the fact that many governments are reluctant to approve commercial production. While the technology has great potential, there are genuine concerns about this technology. If the sub-region is to benefit quickly from modern biotechnology tools and products in a safe environment, some of the specialized services may be more effectively be addressed at the sub-regional rather than at the country level in order to maximize the use of both human and material resources. Tackling biosafety issues at a sub-regional level is also logical as technologies, GM plants will informally be able to cross national borders, and therefore risk assessments and legislations of different nations must consider practices and biodiversity present in neighboring countries. This activity, set-up by ICAC and DAI, entailed a 3-day workshop in Burkina Faso which will focus on the above issues and which will allow the sharing of experiences from other countries, particularly developing countries. The workshop promoted direct open discussions with government authorities responsible for making decisions on the issue in the region. The stakeholder workshop had the following specific objectives: (1) provide an open platform for discussion on biotech cotton; (2) facilitate a better understanding of a science-based regulatory system and provide better understanding of patents and intellectual property protection law; and (3) examine West African small scale farmers' expectations from biotech cotton as well as identify major constraints and challenges that need to be addressed for the ultimate benefit of small scale cotton farmers. Participants included key policy makers, development and donor agencies, research scientists, representatives of farmers' associations and members of the cotton chain. Representatives of the private sector involved in biotech issues, and recognized international experts outside the region discussed selected topics. The workshop did not have an advocacy role, but promoted instead the sharing of information.

### **REGULATORY ASSISTANCE (A.3.3)**

*Activity 9.3: Burkina Faso Field Trials Training*

This activity was conducted at the request of the National Biosecurity Agency of the Ministry of Environment in Burkina Faso and provided technical assistance to strengthen its risk assessment and risk management capability with respect to environmental releases of transgenic plants in agriculture. A workplan of training activities was developed in consultation with the National Biosecurity Agency in August 2006 (Activity 9.2). The activity was executed by AgBios and focused on a training workshop (27 November – 2 December, 2006) on the regulation and risk management of confined field trials, which provided the following: (1) a review of the relevant information requirements for applications for experimental confined field trials and result in the elaboration of the “formulaire de demande d’essai de recherche au champ en conditions confinées” (application form); (2) a training for ANB staff on risk assessment and compliance management of confined field trials; (3) the development of general and specific terms and conditions of authorization; (4) the development of crop-specific inspection and monitoring standards and procedures, and (5) a Bt cotton field trial visit.

#### *Activity 21.1: Technical assistance on the Cotton CRC meeting- Jaffe*

USAID supports an initiative by INSAH to develop a regional biosafety framework for West Africa. INSAH hosted the inaugural meeting of the Regional Consultative Committee (CRC) on July 17-19, 2007. The CRC is the body through which the regional biosafety convention will be developed and approved. CRC delegates will carry recommendations and outcomes of the meeting back to their respective countries for approval. USAID supported the travel of a bio-safety and bio-technology expert (Dr. Gregory Jaffe, Director, Biotechnology Project, Center for Science in the Public Interest) to attend the Regional Consultative Committee (CRC) meeting in Bamako, Mali, July 17-19 2007. In particular, the expert presented the World Bank-WAEMU regional biosafety project to the meeting participants and led discussions on how the present INSAH initiative can be coordinated with the WAEMU project.

### **TECHNICAL ASSISTANCE TO FOOD AID RECIPIENT COUNTRIES (A.3.4)**

#### *Activity 6: Economic Analysis to Support Priority Setting for Investment in Ag-Biotech West Africa*

DAI has issued a fixed-price purchase order to Dr. Jeremy Foltz to perform an economic analysis to support priority setting for investment in agricultural biotechnology for West Africa. Using a model of regional agricultural production and markets developed by the International Food Policy Research Institute (IFPRI) that can be used to generate impact estimates for agricultural technologies in general, Dr. Foltz has analyzed the potential impact of specific agricultural biotechnologies for West Africa.

#### *Activity 12.2: Viet Nam Field Trials Workshop*

Pursuant to RDM/A's goal of supporting regional biotechnology policy development, DAI's implementing partner AGBIOS organized a conference in Viet Nam on field trial compliance for delegates from ASEAN countries.

#### *Activity 23: Brochure Translation*

This activity entailed the translation (into French) and reproduction (at 1,200 units) of a USAID brochure titled "Agricultural Biotechnology for Development".

### **BIOSAFETY POLICY AND REGULATORY ASSISTANCE (A.3.5)**

#### *Activity 16: Kenya Safety Bill – Outreach to Parliamentarians*

The need to enhance parliamentarians' understanding of the technical, legal, environmental and socio-economic issues and subsequent implications of a quality and practical regulatory process to guide deployment of

biotechnology is eminent. Evidence abounds of their low levels of knowledge on the subject and to a majority, non-appreciation of the important contribution that modern biotechnology could make in the national economy. Exerts from a motion that debated a ban on GMOs in Kenya last year exposed the high level of ignorance and confusion in matters related to the legal process. And, with a likely tabling of the national draft biosafety bill in parliament for eventual enactment, the current scenario calls for concerted efforts to correct the situation. The proposed activities aim at addressing this challenge by reaching out to the relevant parliamentary committees and building a strong team of champions to ably defend the Bill from a point of knowledge. The activity has three components: (1) lunch meetings with parliamentary committee members; (2) a roundtable with wider group of parliamentarians; and (3) a workshop in Mwea on KARI's Bt-cotton trials.

#### *Activity 19: Support to the West Africa Regional Biosafety Initiative*

USAID continued to support to the West Africa Regional Biosafety Initiative, and support participation of experts in the upcoming West Africa Ministerial conference, through four upcoming activities: (1) representation of the initiative at Third Coordination Meeting for Governments and Organizations Implementing of Funding Biosafety Capacity-Building Activities, 26-28 February 2007, Lusaka, Zambia, hosted by the Secretariat to the Convention on Biological Diversity; (2) participation on CORAF selection panel for Biotechnology Coordinator position and meetings with CORAF representatives on CORAF biotechnology- and biosafety-related priorities, 5-9 March 2007, Dakar, Senegal. This will also included meetings with the INSAH Biosafety Coordinator and USAID Africa Mission representative to be held either in Dakar or Bamako; (3) technical assistance in the development of a Memorandum of Understanding between WAEMU and ECOWAS for cooperation on a unified regional biosafety initiative for West Africa; and (4) technical assistance to West African experts in the development of a background paper and presentation on biosafety for the West Africa Ministerial conference. The representation was provided by AgBios in the person of Mr. Don MacKenzie.

#### *Activity 22: Risk Assessment Workshop Burkina Faso*

This was a technical assistance activity at the request of the National Biosecurity Agency of the Ministry of Environment in Burkina Faso to strengthen its risk assessment and risk management capability with respect to pre-market environmental risk assessment for the release of transgenic plants in agriculture. This activity is included in the work plan of training activities that was developed in consultation with the National Biosecurity Agency in August 2006 (Activity 9.2). This second training activity (10 – 13 September 2007) was a workshop on the pre-market environmental risk management of Bt cotton, which will provide the following: (1) a risk assessment case study based on MON 15985 Bt cotton, which has been part of field trial evaluations in Burkina Faso since 2003; (2) training for ANB staff and specialist scientific advisors on data requirements and risk assessment for pre-market approval of transgenic crops. Executed by AgBios, the activity included: (1) the organization and delivery of a 4-day workshop for members of the National Biosecurity Agency, members of the National Biosafety Committee (with representatives from the ministries of health, agriculture, commerce, and research) and specialist scientific advisors with expertise needed for pre-market environmental risk assessment for Bt cotton; (2) the preparation of a case study application for MON 15985 based on information available from regulatory agencies and the developers; and (3) the translation into French of the AGBIOS case study on MON 15985 cotton that will provide a valuable resource for the National Biosecurity Agency of Burkina Faso and for regulators and scientists in other Francophone countries in West Africa.

## TECHNICAL CONFERENCES (A.3.6)

### *Activity 7: Kenya Roundtable on Biotech*

This activity was cancelled.

### *Activity 14.3: Burkina Faso Field Visit and Workshop*

This ISAAA executed activity focused on a field visit to Bt cotton field trials and a conference in Burkina Faso, which gave cotton stakeholders in the region (Mali, Burkina Faso, Senegal, Benin, and Togo) the opportunity to see and hear about the results of the Bt cotton field trials currently being conducted by INERA. For stakeholders to really understand the technology and the benefits and potential risks of GM crops, there is nothing better than for them to actually see the crops on the ground and to talk to farmers first hand. These ‘seeing is believing’ activities have proven to be extremely effective in other ISAAA outreach activities in Asia and other parts of Africa in demystifying biotechnology, in particular GM crops to non-technical stakeholders.

### *Activity 14.6: Journalist Training Ghana Ministerial Conference, 25-30 March, 2007*

The 3rd ECOWAS (Economic Community of West African States) Ministerial Meeting on Biotechnology took place in Accra, Ghana from March 27-30, 2007. This meeting’s principal objective is to endorse and implement an action plan for the development of biotechnology and biosafety in countries of the ECOWAS. More specifically, the Plan aims to develop biotechnology application in order to improve agricultural productivity and stimulate competitiveness, while maintaining the natural resource base and creating an enabling environment for this, through the establishment of a sub-regional approach to biosafety and a steering, monitoring and evaluation committee, which would facilitate the implementation of the Plan. With the promotion of responsible deployment of biotechnology in the region as the main thrust of the conference, the meeting is bound to attract some strong reactions from civil society groups. Several NGOs including Consumers International, the Coalition pour la protection du patrimoine genetique au Mali, and the ‘Reseau des Organisations Paysannes et des Producteurs d’Afrique de l’Ouest’ (ROPPA) are likely to attend the Conference and make their voices heard as they did so in Bamako in 2005. It is thus necessary to ensure that correct, balanced, and consistent messages on biotech and biosafety issues are shared with the public through the media. ISAAA will: (1) Facilitate a two-day media training workshop for journalists from the West African region in preparation for the Ministerial Meeting; (2) monitor the nature of biotech media coverage and where necessary (in cases of gross misinformation) provide timely rejoinders; and (3) provide the international media and other biotech stakeholder organizations present with timely press releases on specific topics and issues covered by the meeting.

### *Activity 17: ECOWAS Ministerial Meeting on Biosafety, Accra, March 27-30, 2007*

The Third ECOWAS Ministerial Conference on Biotechnology and Biosafety was hosted by the Government of Ghana from March 27-30, 2007, in Accra, Ghana. The overall goal of the conference was to create political momentum to drive the ECOWAS Biotechnology and Biosafety Action Plan and to examine/adjust the Plan based on studies and processes that have recently been completed. ECOWAS and the Government of Ghana will contribute the bulk of the funds while USAID/WA has agreed to fill in the remaining gap. The activity entailed providing organizational support to the conference (contract with local partner FARA, hotel/facility reservations,

contracting speakers, translate the paper developed by Dr. Foltz under activity 6, and delegate a resource person to the conference).

## **TRADE CAPACITY BUILDING (A.3.7)**

### *Activity 12: Biotech Policy ASEAN Nations*

This activity was cancelled.

# **ONGOING ACTIVITIES**

## **BIO-ENGINEERED COTTON IN AFRICA (A.3.2)**

### *Activity 18: Cotton Breeder Training Project*

The objective of this activity is to provide training to West African cotton breeders from cotton-4 countries. The program took on the form of a 6 month program at two universities, New Mexico State University and the University of Arkansas in advanced molecular breeding techniques. Cotton is an economic mainstay in West Africa, generating a major share of the exports in several countries and contributing to the livelihoods of significant numbers of people in farming and related sectors. Under the USAID West African Cotton Improvement Program (WACIP), the U.S. government is meeting its commitments to the C4 countries (Benin, Burkina Faso, Chad, and Mali) by providing assistance to the cotton sector – in part through improving yields and incomes of cotton producers. There is limited scientific capacity in these countries, however, to use transgenic materials in breeding programs or to carry out advanced breeding activities. USAID was therefore seeking to provide short term technical training to WA cotton breeders in order to build national capacity in molecular breeding techniques. The countries and NARS institutes included here are: Benin (Institut National des Recherches Agricoles du Benin – INRAB), Burkina Faso (Institut National pour l’Environnement et al Recherche Agricole – INERA), Chad (Institut Tchadien de Recherche Agronomique pour le Développement – ITRAD), Mali (Institut d’Economie Rurale – IER). Under separate funding a 5th candidate from Malawi was added to the group.

### **REGULATORY ASSISTANCE (A.3.3)**

#### *Activity 9.1: Bt Cotton pollen-mediated gene flow study*

Under this activity, AGBIOS will address the potential pollen-mediated gene flow from Bt cotton to conventional cotton and near cotton relatives in Burkina Faso. Pollen-mediated gene flow will be considered in two agronomic settings typical of cotton production in West Africa. The proposed testing will take place using local cotton varieties into which the insect-resistance trait has been introgressed by traditional cross breeding. The trials will involve scientists from INERA which will build experience in this institution and the information gained from the pollen flow study will be directly applicable to the evaluation of Bt cotton in Burkina Faso as well as other regions of West Africa where similar cotton varieties are grown. An important downstream component of this activity will be information sharing and communication with other scientists and stakeholders in the region.

#### *Activity 21.2: Technical assistance on the Cotton CRC meeting- AgBios*

USAID is currently supporting an initiative by INSAH to develop a regional biosafety framework for West Africa. INSAH hosted the inaugural meeting of the Regional Consultative Committee (CRC) on July 17-19, 2007. Consisting of delegates from ECOWAS and CILSS countries, the Committee will form working groups to define its role and procedures. The CRC is the body through which the regional biosafety convention will be developed and approved. CRC delegates will carry recommendations and outcomes of the meeting back to their respective countries for approval. INSAH has requested assistance in developing the program and moderating this meeting. AgBios will provide this assistance. INSAH will propose to the CRC that it commissions a study on the health and environmental safety of Bt cotton. The study would convene a regional panel of qualified scientific experts to form a consensus assessment of the safety of Bt cotton. INSAH has requested support in formulating this suggestion to the CRC delegates, and in providing technical assistance and guidance to the study panel. Tasks in this activity include: identifying delegates, presenters and participants, developing an agenda, preparing background materials, outlining expectations and procedures, moderating discussions, providing guidance on next steps in the organization plan and in the creation a regulatory framework, describing experiences gained in other countries/situations having relevance to the current process, presenting background information on the functioning of other biosafety frameworks, assisting with presenting to the CRC delegates the suggestion to convene a study panel on the environmental and health safety risks of Bt cotton.

### **TECHNICAL ASSISTANCE TO FOOD AID RECIPIENT COUNTRIES (A.3.4)**

#### *Activity 14.1: Activities with RECOAB and the media*

This activity focuses on the further strengthening and training of RECOAB (**R**éseau des **C**ommuniquéurs **O**uest **A**fricains sur la **B**iotecnologie Agricole). In sub-Saharan Africa, the mass media remain the major source of information on agricultural biotechnology. Surveys conducted in East and South Africa (ABSF/ISAAA 2004; AfricaBio 2005) have found that over 60% of stakeholders obtain biotech information from the mass media. However, despite their acknowledged role however, mass media in Africa appear unprepared to handle the complex issues involved from a balanced perspective. Ironically, even policy-makers and majority politicians rely a lot on the information they obtain from the media. Implementation of a strong regional

communication strategy has remained sporadic, leaving a large proportion of the public highly vulnerable to manipulation by strong anti-biotechnology lobbyists. To address the communication challenge, the International Service for the Acquisition of Agri-biotech Applications (ISAAA) will work very closely with other stakeholders in the region to strengthen the media role in biotechnology awareness creation. Under these capacity-building activities, journalists will develop competencies in the area of biotechnology and will be facilitated to build a body of credible network of contacts on the subject. Proposed activities include: (1) a 2-day biotech sensitization workshop for media professionals (including rural radio and TV) in local language in Mali and/or Burkina Faso; (2) radio and TV plugs on biotech in the local language in Mali and Burkina Faso; (3) media activities surrounding the launch of the ISAAA Annual Review of Biotech Crops scheduled to be published and distributed in January 2007

*Activity 14.2: Regular biotech briefings with policy makers, media, farmer groups, etc.*

For the success and realization of the benefits of biotechnology in Africa, (and indeed globally) acceptance and positive attitudes among consumers will have to be cultivated. There is therefore a need to engage a wide range of stakeholders on a regular basis to capture the concerns and to develop rapid response mechanisms to these issues. Of particular significance of this stakeholder constituency are politicians and parliamentarians who, like the mass media also command a very big audience and whose public pronouncements shape opinions and policies. This is particularly important since majority of countries are still in the process of developing policies and drafting Biosafety guidelines and regulations for presentation and debate in parliament in readiness for enactment into laws. To meet these new challenges, ISAAA will continue not only strengthening the on-going acceptance and capacity building activities in the region but also doing more interactive work targeted to key opinion leaders like politicians, parliamentarians, regulatory agencies, seed traders and farmer-service provider groups. This activity will include study tours, the production and distribution of handout materials, and a biotech speaker program.

*Activity 14.4: Translation, production, and dissemination of information and educational materials*

This ISAAA executed activity focuses on an informational campaign that involves O Activity 14.4: Translation, production, and dissemination of information and educational materials and ISAAA key publications (e.g. Pocket K, Annual Review of Biotech Crops, etc.).

*Activity 14.5: Support for the Burkina Biotech Association and the ISAAA's Mali information node*

ISAAA, which is executing this activity, has worked with the Burkina Biotech Association (BBA) and the l'Institut d'Economie Rurale since 2003 in disseminating information and materials to local stakeholders but worked with them closely during the last Ministerial Meeting held in Mali. Together, we planned press conferences and a communication training workshop for scientists. BBA is an organization that consists of biotech stakeholders from both the private and public sectors in the country whose mission is among others, to assist in raising awareness and understanding of biotechnology, in particular genetically modified organisms, among the general public. It is the first of its kind in the sub-region and is headed by Professor Alassane Sere, a former Minister (Animal Resources) in the Burkina cabinet and a veterinarian by training. IER is the largest of the national research institutions for agricultural research in Mali. The activity entails mailing list distribution in Burkina Faso and Mali, and networking with key decision makers (politicians, farmer leaders, extension workers, local private sector, etc.).

## **BIOSAFETY POLICY AND REGULATORY ASSISTANCE (A.3.5)**

### *Activity 8.3: RDMA Policy Support #2 (Viet Nam)*

This activity supports USAID/RDM Asia in the development of a regional biotechnology policy in South East Asia to further the overlapping goals of environmental protection, trade facilitation, and agricultural development. Regional cooperation on biotechnology policy could be facilitated by either: 1. Promoting collaboration with the Association of South East Asian Nations (ASEAN) on a regional program; or 2. Focusing on selected countries where it is possible to complement Mission and/or leverage resources. Agbios (1) developed an alternative proposal for a 2-3 year ASEAN pilot program with Vietnam and one other ASEAN country, which was submitted to EGAT and RDM/A for presentation at the US-ASEAN information coordination meeting (April 2-3, 2007); (2) held consultations with Vietnamese officials to draft a 2 year program of work aimed at moving biosafety regulatory development forward in Vietnam; and (3) by May 31, 2007, submitted to EGAT and RDM/A a 2-3 year program of work for a phased pilot program in 2 countries that will include options and approach to identifying a 2<sup>nd</sup> ASEAN pilot country and for outreach to ASEAN to build support for regional biosafety regulatory discussions at the pilot projects conclusion.

### *Activity 10.1: Biosafety Review of Field Trials*

Dr. MacLean of AGBIOS will coordinate the review of applications for confined field trials of any bioengineered organism for completeness and alert USAID to any gaps that the applicant must fill. She will also identify 3-4 external reviewers for each field trial application.

### *Activity 10.2: Coordination of Review Activities for Commercial Release*

Dr. MacLean of AGBIOS will coordinate the review of applications for open release of any bioengineered organism for completeness and alert USAID to any gaps that the applicant must fill. She will also identify 3-4 external reviewers for each open release application.

## **TECHNICAL CONFERENCES (A.3.6)**

### *Activity 20: APEC Workshop on Liability and Redress, Japan, February 2008*

At the January 2007 meeting, the APEC High Level Policy Dialog on Agricultural Biotechnology (HLPDAB), approved a workshop addressing issues surrounding article 27 of the Cartagena Protocol on Biosafety, dealing with Liability & Redress. Enthusiasm for this activity by APEC member economies follows in part from the positive feedback received on the January 2006 APEC workshop Biosafety Policy Options sponsored by the USG and the Government of the Philippines. The USG considers this a timely opportunity to educate, engage and possibly influence APEC economies, particularly the developing economies, prior to the next meeting of the parties to the Protocol. The workshop will take place in February 2008. USAID will be the lead USG agency, but will work closely

with other USG agencies, most notably USDA-FAS, the State Department, and will solicit input from industry to develop the agenda for the workshop. The organization is being managed by DAI.

### **TRADE CAPACITY BUILDING (A.3.7)**

#### *Activities 12.1, 12.3, 12.4: ASEAN Technical Assistance*

USAID/RDM Asia supports regional biotechnology policy development in South East Asia and aims to further the overlapping goals of environmental protection, trade facilitation, and agricultural development. Activities 12.1, 12.3 and 12.4 represent three proposed activities in this context. South East Asian countries, such as Indonesia, Thailand, the Philippines and Malaysia, are investing in the development, and adoption of agricultural products derived from modern biotechnology (*e.g.* genetically modified crops, microorganisms, fish for aquaculture, animals and trees for agro-forestry). Regional collaboration and sharing of experience can be beneficial in assisting more countries within the South East Asian region to establish sound biotechnology policies that address the themes of safety, development, investment and trade. In an attempt to facilitate such a regional exchange, these activities propose to promote regional biotechnology policy dialogue, strengthen the capacity of South East Asian national agencies to implement biotechnology policy, and strengthen linkages between RDM/A and the ASEAN Secretariat. The activities will be executed by AgBios, and are tentatively named as: Policy Assessment in ASEAN Countries (12.1), SE Asia Regional Policy Capacity Building Dialogue 1 (12.3), SE Asia Regional Policy Capacity Building Activity 2 (12.4).



# ANNEX 1.

## CONTRACT DELIVERABLES COMPLETED/IN PROGRESS

Deliverables		Number of Deliverables completed as of September 2007	Year 1: October 2005–September 2006 (Completed Activities)	Year 2: October 2006–September 2007 (Completed Activities)	Year 3: October 2007– September 2008 (Ongoing Activities)
1.	5 study tours related the following tasks: cotton, regulation of biotechnology; and regulation of imports such as food aid;	1	<i>Activity 13: West Africa Policy Support</i>		
2.	11 technical conferences, related to the following tasks: cotton, food aid, regulation of biotechnology, trade capacity building, and regional policy dialogs;	7	<i>Activity 1: APEC Conference</i>	<i>Activity 12.2: Viet Nam Field Trials Workshop</i>  <i>Activity 15: Burkina Faso Cotton Workshop</i>  <i>Activity 12.2: Viet Nam Field Trials Workshop</i>  <i>Activity 22: Risk Assessment Workshop Burkina Faso</i>  <i>Activity 14.3: Burkina Faso Field Visit and Workshop</i>  <i>Activity 17: ECOWAS Ministerial Meeting on Biosafety wGhana</i>	<i>Activity 20: APEC Workshop Japan</i>
3.	3 short-term training programs on breeding of biotechnology crops or management of insect resistance in biotech cotton;	2	<i>Activity 2: Entomology Training</i>	<i>Activity 9.3 Burkina Faso Field Trials Training</i>	<i>Activity 18: Cotton Breeders Training</i>

4.	Technical assistance to up to 10 countries in regulatory aspects of biotechnology (related to cotton, food aid, or adoption of biotechnology crops), including road maps for regulatory development, guidelines, and training.	11	<p><i>Activity 3: INSAH/CILLS Technical Support</i></p> <p><i>Activity 4: Translation of ECOWAS action plan</i></p> <p><i>Activity 5: INSAH Technical Support 2</i></p> <p><i>Activity 9.2 Technical Assistance to Burkina Faso</i></p> <p><i>Activity 11: INSAH Convention Translations</i></p>	<p><i>Activity 10.1: Biosafety Review of Field Trials</i></p> <p><i>Activity 10.2: Coordination of Review Activities for Commercial Release</i></p> <p><i>Activity 21.1: TA to Cotton CRC Meeting</i></p> <p>Activity 16: Kenya Safety Bill Outreach</p> <p>Activity 19: Support to WA Regional Biosafety Initiative</p> <p>Activity 14.6: Journalist training Ghana Ministerial Conference</p>	<p><i>Activity 9.1 Bt Cotton pollen-mediated gene flow study</i></p> <p><i>Activity 21.2: Technical Assistance on the CRC Meeting</i></p> <p><i>Activity 14.1: Activities with RECOAB and the Media</i></p> <p><i>Activity 14.2: Regular Briefings with Policy Makers, Media, Farmer Groups, etc.</i></p> <p><i>Activity 14.5: Support to Burkina Biotech Association and Mali Information Node</i></p> <p><i>Activity 8.3: RDMA Policy Support #2</i></p> <p><i>Activity 10.1: Biosafety Review of Field Trials</i></p> <p><i>Activity 10.2: Coordination of Review Activities for Commercial Release</i></p> <p><i>Activities 12.x: ASEAN Technical Assistance</i></p>
5.	Briefing papers related to the following tasks: food aid, regional policy dialogs, trade capacity building, and regulatory assistance.	2		<p><i>Activity 6: Economic Analysis to Support Priority Setting for Investment in Agricultural Biotechnology for West Africa</i></p> <p><i>Activity 23: Brochure Translation</i></p>	<p><i>Activity 14.4: Translation, Production and Dissemination of information materials</i></p>
6.	Curriculum for 2 USAID and USG training courses in biotechnology.	2	<p><i>Activity 8.1: RDMA Policy Support</i></p> <p><i>Activity 8.2: RDMA Policy Support # 2</i></p>		
7.	Progress reports.	3	<p><i>Oct 2005 – Feb 2006</i></p> <p><i>Mar 2006–Sep 2006</i></p>	<p><i>Oct 2006 – Sep 2007</i></p>	